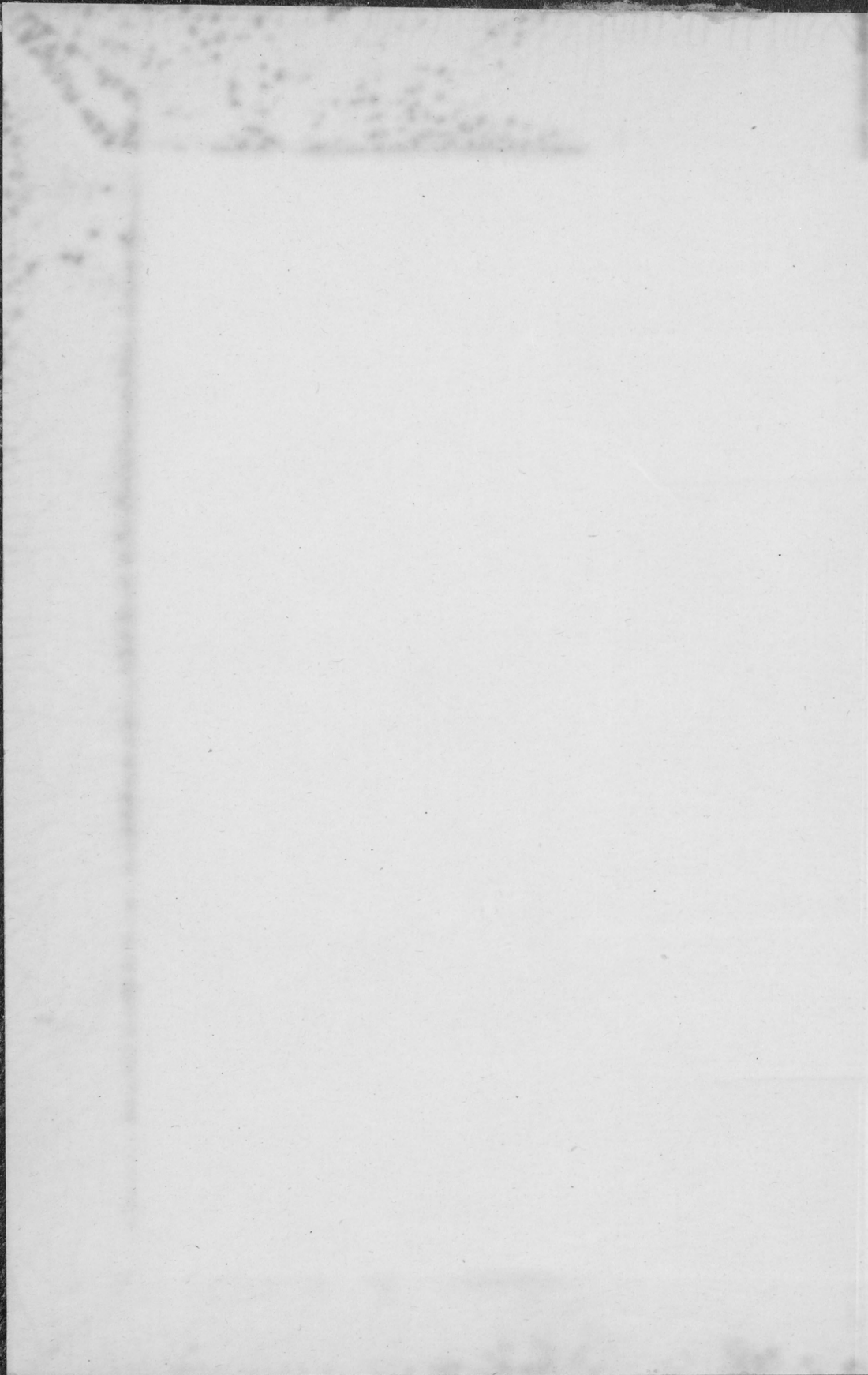


**JUNIOR CO-OPERATIVE
VARIETY TESTS**

1935-1949

G. W. ROBERTSON



Barley Varieties in Saskatchewan

— 1935 —

A CO-OPERATIVE TEST

Sponsored by the Saskatchewan
Co-operative Wheat Producers
Limited in collaboration with the
National Barley Committee and
conducted by three hundred and
sixty Junior and Senior Farm Co-
operators under the auspices of
the Breeding and Production
Committee of the National Barley
Committee, the University of
Saskatchewan, the Central Ex-
perimental Farm at Ottawa, and
the Dominion Experimental
Farms or Stations in
Saskatchewan



Published by the
SASKATCHEWAN CO-OPERATIVE
WHEAT PRODUCERS
LIMITED

February
1937

CONTENTS



	<i>Page</i>
Foreword.....	3
Introduction.....	4
Procedure.....	4
Plan of Test.....	5
Location of Plots.....	7
List of Co-operators.....	9
Map of Cereal Variety Zones.....	11
Individual Results.....	12
Summarization according to Cereal Variety Zones.....	43
Summarization according to Agronomic Characters with Histograms of each.....	47
Summary of Varietal Performance.....	55
Conclusions.....	56
Acknowledgments.....	56

FOREWORD

By the President of the Saskatchewan Co-operative
Wheat Producers Limited



THE SASKATCHEWAN WHEAT POOL *welcomes the opportunity to associate itself with the National Barley Committee of Canada in the essential research work which it has undertaken.*

Since their inception the Wheat Pools have consistently endeavoured to assist in every way possible the production of high quality grains. In so doing they have recognized the need for a research programme of the nature and extent of the one outlined in this bulletin. While the data contained herein covers but one year's results in a three-year programme, it clearly indicated the value of the experiment from the standpoint of producers, marketing agencies, and all agricultural bodies interested in the growing of barley in Saskatchewan.

The place which Canadian barley occupies in world trade is naturally a matter of vital interest to Canadian farmers. The information furnished by this experiment (possibly the largest of its kind ever undertaken in this country), should greatly assist in any programme designed to increase interest and to improve our methods of growing either malting or feeding barleys.

The matter of relating barley varieties to those soil-climatic zones for which they are best adapted, is of primary importance in any intelligent barley production programme. Valuable information on this and other important factors are being found as a result of this co-operative test. The fact that all parts of the Province are included makes it possible to ascertain in a short time what would otherwise take many years to establish.

L. C. BROUILLETTE.

INTRODUCTION

THE grain growing part of Saskatchewan covers an area some 400 miles from east to west, and more than 300 miles from north to south. This vast area contains a great diversity of soils and climates. While there are, in general, only four major soil-climatic zones the variations within the zones make it impossible for the results obtained at the six experiment stations in the province to be exactly applicable to every farm in the province. Some farms are more than a hundred miles from the nearest experiment station. Often the soil a few miles from a station is not at all similar to that at the station. Therefore, notwithstanding the great value of the variety tests made at the experiment stations, there is need of supplementary tests placed in other parts of the province.

The information obtainable from supplementary tests is of much value, providing the tests are properly managed throughout the season. While a single year's results strictly are applicable only to conditions such as obtained during that year, nevertheless, one year's results from a wide range of places yield a large amount of useful information. This information when made available immediately to the farming public assists them in their choice of varieties and in their understanding of the comparative performance of different varieties, and is one of the valuable results of supplementary tests run by farmer co-operators.

Another advantage is that the co-operator finds out just how a really reliable variety test is laid out and conducted. He sees for himself that all plots of one variety are not identical owing to soil and other differences. He therefore understands why it is necessary to have several distributed plots of each variety. He also sees the value of having the plots small enough to be easily compared with one another, and the necessity for using great care in making measurements and taking notes.

A third advantage of such tests lies in the contact the co-operator, particularly the junior co-operator, has with the agencies promoting agricultural welfare. This contact gives him an appreciation of the kind of work being done to make farming more successful, and acquaints him, through conversation and literature, with the latest advances in agricultural science. The contact also gives the co-operating institutions an opportunity to gain intimate knowledge of the immediate pressing problems of the farmers.

During the winter of 1934-35 the Saskatchewan Wheat Pool, after consultation with the National Barley Committee, agreed to sponsor a very extensive series of co-operative barley tests, these tests to be conducted under the auspices of the Breeding and Production Committee of the National Barley Committee.

THE PROCEDURE

The project, as finally agreed upon, included a three-year programme, as well as a one-year series of tests. This latter series of tests was primarily a junior co-operative project. The data presented in this bulletin include the results for one year for both the programmes as outlined above.

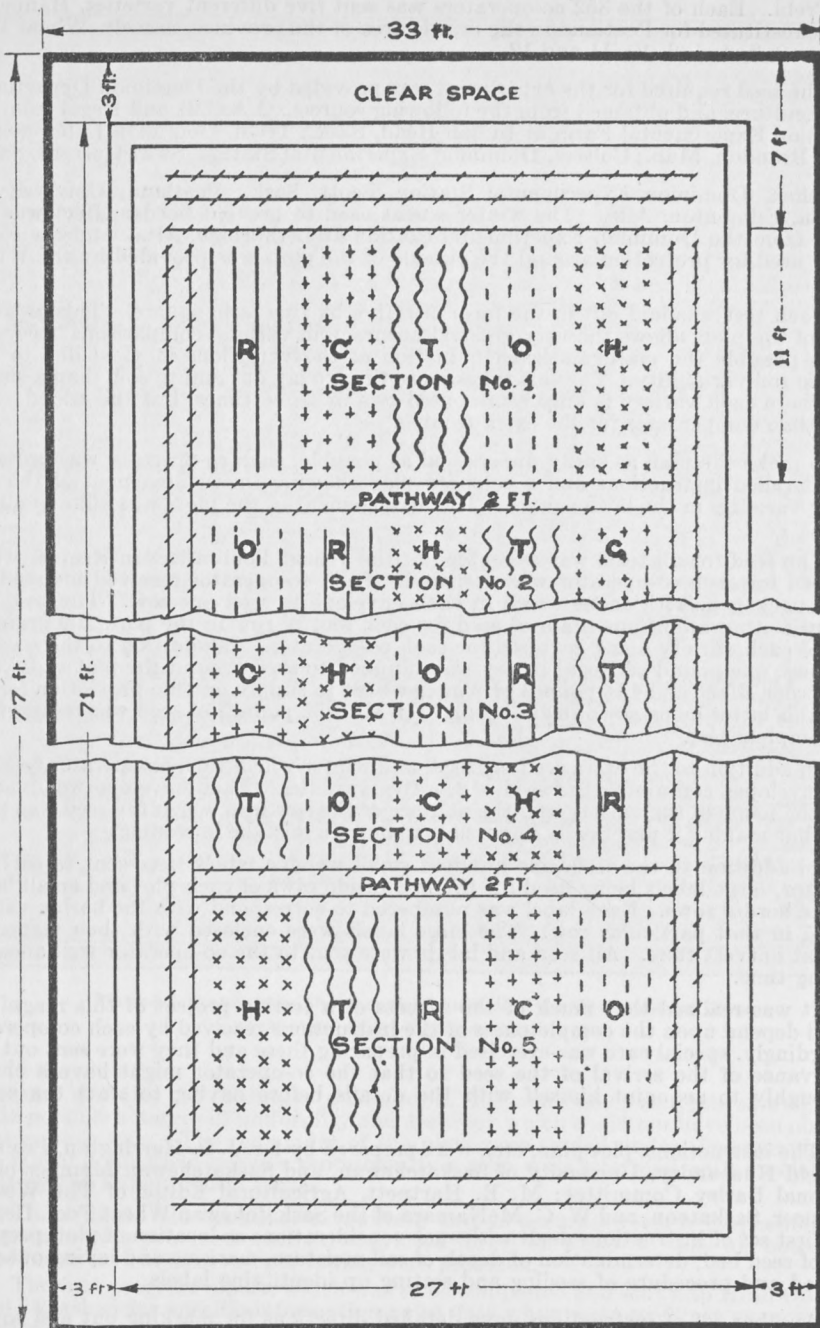
Under the three-year plan there were 32 sets of test plots, two in each of the sixteen Pool districts into which the province is divided. These plots were similar in all respects to the plots operated by the junior growers in the one-year programme, but were to be carried on for a period of three years.

In the case of the one-year or junior co-operative programme, two junior co-operators were nominated from each Wheat Pool sub-district, making a total of 20 junior co-operators for each district, or a total of 320 for the province. This method of distribution assured satisfactory coverage of the chief soil-climatic zones found in the province.

Plot supervisors for the 32 three-year plots were nominated by the Wheat Pool directors, each director being invited to nominate two reliable and experienced growers in his district.

Information on both malting and feeding barleys was required, the following varieties being selected for the test: O.A.C. 21, Regal, Colless, Hannchen or Peatland

CONDENSED PLAN OF TEST



LEGEND

- REGAL (R) & REGAL BARLEY BORDER
- ~ TREBI (T)
- - - O.A.C. 21 (O)
- +++++ COLSESS (C)
- xxxxxxx HANNCHEN OR PEATLAND (H)
- +++++ SPRING SOWN WINTER WHEAT

and Trebi. Each of the 352 co-operators was sent five different varieties, Hannchen being substituted for Peatland in the prairie area of the province, namely Wheat Pool districts 2, 3, 4, 5, 6, 10, 11 and 12.

The seed required for the experiment was provided by the Dominion Department of Agriculture, and obtained from the following sources: O.A.C.21 and Regal from the Dominion Experimental Farm at Indian Head, Sask.; Trebi, Dominion Experimental Farm, Brandon, Man.; Colseess, Dominion Experimental Station, Swift Current, Sask.;

Hannchen, Dominion Experimental Station, Scott, Sask.; Peatland, University of Alberta, Edmonton, Alta. The winter wheat used to prevent border effect was obtained from the Dominion Experimental Station at Lethbridge, Alta., and the Regal barley used for protection around the outside of the plots was provided by the Wheat Pool.

Each test was laid out in the form of a five by five latin square. This arrangement of the plots allows the very greatest accuracy in varietal comparisons because it makes possible the mathematical elimination of the variations in yield due to systematic soil variability. The test takes more time to lay out and to sow than a simple test where each variety is only represented two or three times, but the added value more than compensates for the extra trouble.

To make the plan as easily understood as possible, each co-operator was provided with detailed instructions and a coloured plan showing the arrangement of the five barley varieties in the latin square. The arrangement of the plots was alike in all the tests.

The seed for all tests was assembled at the Wheat Pool offices in Regina, where the seed for each co-operator was prepared. Each co-operator received his seed, all ready packaged, with enough seed in each envelope to seed one row. The seed was put up at the rate of one gram of seed for each foot of row in the plot, 200 grams of seed of each variety being required for each co-operator. In addition to the seed for the rows, one pound of Regal barley was supplied to seed around the plot to take up the border effect and $1\frac{1}{2}$ pounds of winter wheat to supply outside protection for the plot, this latter being sown in the spring. In all 1232 pounds of seed was required for the complete test.

In addition to the extra seed of Regal and winter wheat each co-operator received 100 envelopes containing the seed of the five varieties. Each envelope was marked with the name of the variety and the number of the row into which the seed was to be put, thus making it practically impossible to make a mistake in seeding.

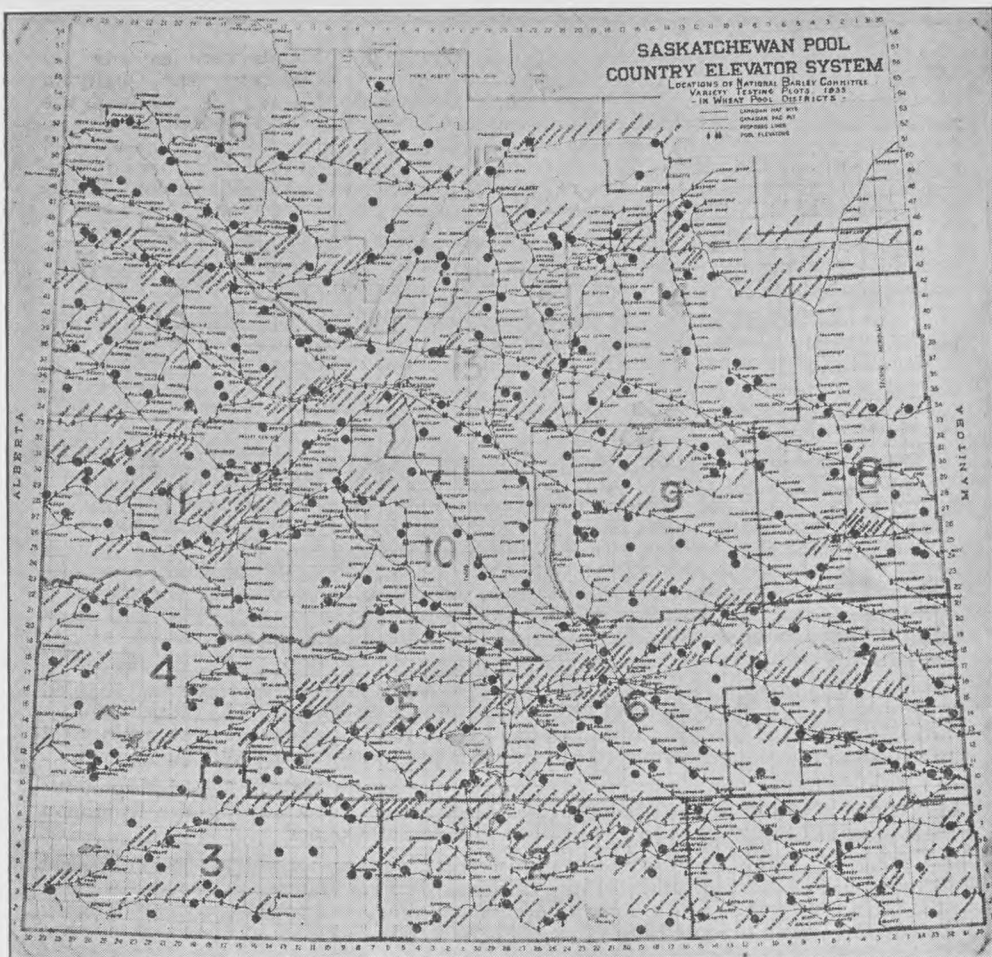
In addition to the seed, one hundred small wooden labels were sent to each co-operator, large labels being used for the two inside rows of each plot and small labels for the border rows. Each label was numbered to correspond with the barley variety seeded in that particular row. The large labels were enclosed with their respective rows at harvest time. All seed and labels were sent to the co-operator well ahead of seeding time.

It was realized that much of the success of a testing project of this magnitude would depend upon the completeness of the instructions received by each co-operator. Accordingly, special care was exercised in preparing these and they were sent out well in advance of the arrival of the seed so that the co-operator might have a chance thoroughly to acquaint himself with the details before having to start the actual work.

The instructions, plot plan, etc., were prepared by Dr. J. B. Harrington, Professor of Field Husbandry, University of Saskatchewan, and Saskatchewan Member of the National Barley Committee; M. E. Hartnett, Agricultural Editor of The Western Producer, Saskatoon, and W. C. McNamara of the Saskatchewan Wheat Pool, Regina. The first set of instructions dealt with such considerations as location of plot, preparation of seed bed, determination of depth of soil moisture, marking and laying out plot, method and procedure of seeding and setting up identifying labels.

Another set of instructions gave detailed directions for marking out and sowing the plot. This was accompanied by: (1) a rough working plan of the plot, showing temporary stakes, measurements, etc., to be used in marking it off; (2) an enlarged plan of one section of the plot showing details of seeding and spacing; (3) a colored print of the entire plot showing the position of all the varieties in each section, the arrangement of the winter wheat and the Regal barley used for outside protection, and pathways, etc. (See Page 5).

The closest co-operation was given by the various Experimental Farms and Stations in the Province, who undertook to supervise the sowing of the key plots when



Map of Saskatchewan Showing the Location of the Co-operators' Plots
(Each round dot denotes one co-operator's plot)

necessary and also the seeding of a number of the junior one-year plots as well. This made possible a degree of uniformity and accuracy which could not have been obtained in any other way. The remainder of the plots were seeded under the supervision of the Wheat Pool Field Service representatives who were provided with special seed-drills by the Experimental Farms.

To facilitate the taking of as uniform and as accurate records as possible each co-operator was provided with three printed forms on which to take his notes. On these forms instructions re note taking were provided.

The first progress report, which was to be completed and sent into Head Office by June 15, asked for specific information as to date when most seedlings emerged, uniformity of stand, cutworm damage, wireworm damage, soil type, cultural treatment, date of sowing, soil moisture depth and amount of rainfall from seeding to June 10th.

The second progress report was to be filled in and returned to the office by July 15th. It asked for information on each row to be harvested regarding date of heading, insect damage, presence of loose smut, weed interference, and rainfall from June 10th.

The final report was to be sent in by September 1st and covered such points as—date of heading, if not mentioned previously, average height of plant in inches, neck strength, straw strength, date when most heads were ripe, estimated loss from shattering, presence of loose smut, estimated bird damage, and date of harvesting. On all

three reports space was provided for remarks by the co-operator on points not specifically asked for on the report.

During the growing season as many as possible of the plots were inspected by representatives of the Experimental Farms, the University of Saskatchewan, Dominion Seed Branch, Provincial Field Crops Department and the Wheat Pool. Through the generous support of these institutions it was possible to visit most plots at least twice during the summer. Each inspector was provided with a report form which assisted him to check over the various points referred to above and also to give further information that might prove useful. These reports provided valuable independent checks when compared with the co-operator's own report.

In order to obtain as much uniformity as possible in the method of inspection, each inspector was provided with directions on taking notes. These proved especially valuable to inspectors who were not accustomed to experimental plot work.

Prior to harvesting, further instructions were prepared and sent out to all the plot supervisors. In these special attention was given to such points as: the best time to harvest, and how harvesting should be done. Each co-operator was particularly requested to exercise care in the curing of the crop, and in storing it until advised where it would be shipped for threshing. In most cases these were very carefully complied with.

Arrangements were made with the Dominion Experimental Farms or Stations at Indian Head, Swift Current, Scott and Rosthern to do the threshing. The local Pool Elevator Agent supplied the necessary wrapping paper and supervised the shipment. Care was taken to see that the two centre rows of each of the 25 plots were parcelled separately, together with the labels identifying them. Only a small portion of the straw was retained with the heads. After being thoroughly dried the 25 bundles were placed in the required number of gunny sacks and shipped to the Experimental Farm designated. Special shipping tags were sent to each co-operator so that there could be no mistake in identifying the samples when they were received at the Experimental Farm.

Each Experimental Farm was provided with threshing report forms which enabled them to keep a record of the two centre rows of each co-operator's 25 plots. The information obtained following threshing gave grain yield in grams per plot, grain yield in bushels per acre, and grain weight in pounds per measured bushel, machine run.

A malting test was made of composite samples at the Malting Laboratory of the University of Manitoba. This laboratory is assisted financially by the Dominion Department of Agriculture and the National Research Council.

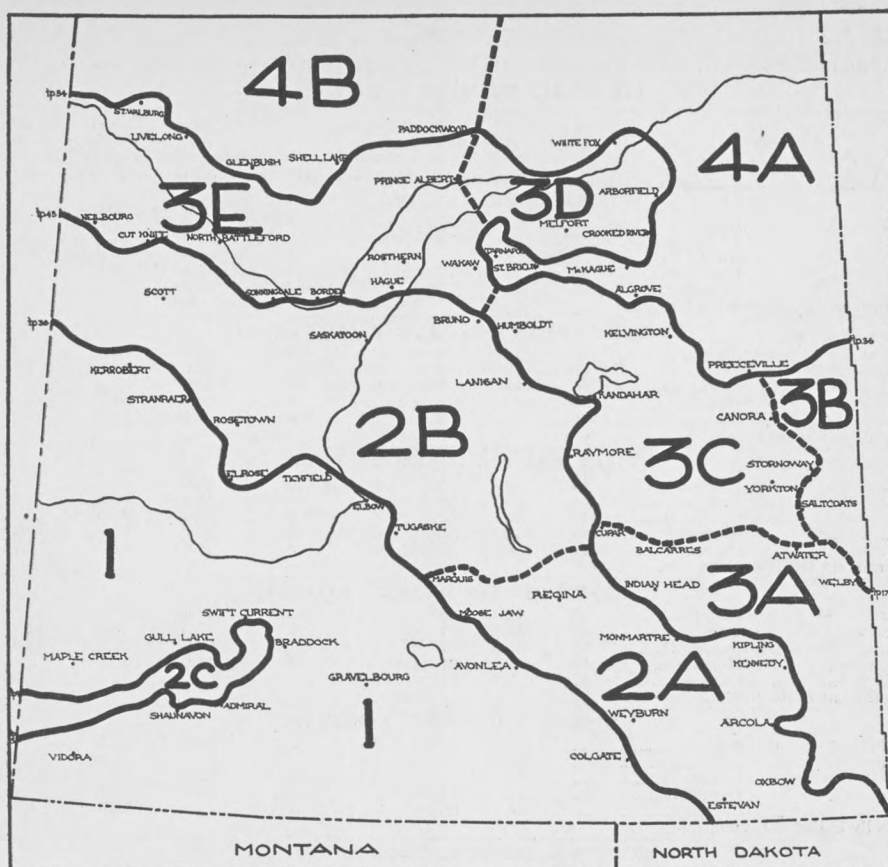
Nitrogen determination, 1000 kernel weights, and bushel weights were obtained and compiled at the Central Experimental Farm, Ottawa. These samples were cleaned to approximately the same standards. The compiling, summarizing and preliminary statistical work on the yield and other agronomic data was done by the Saskatchewan Wheat Pool. The biometrical analysis of these data was done at the University of Saskatchewan.

ALPHABETICAL LIST OF CO-OPERATORS to enable any test to be located easily in Table 1, according to cereal variety zone.

For Example: to find the results of the test conducted by D. C. Brooks, Rosthern, first find his name in this list. After his name, the cereal variety zone designation "3E" is given. Then look in Table 1, in the section devoted to Zone 3E, for Brooks and find Douglas Cameron Brooks, Rosthern.

Name and Address	Zone	Name and Address	Zone
Ahlberg, C. D., Golden Prairie.....	1B	Dunster, R., Blucher.....	2B
Akister, E. M., Tuberoose.....	1B	Dupuis, Gaston, Hoey.....	3E
Allan, N. M., Neville.....	2C	Dutton, Harold, Hazel.....	1B
Anderson, J. R., Courval.....	1A	Edgelow, D. G., Meota.....	3E
Anderson, R., Biggar.....	2B	Egilsson, J. R., Calder.....	3B
Angell, C. A., Rose Valley.....	4A	Elliott, E. G., Sonningdale.....	2B
Axworthy, D. C., N. Battleford.....	3E	Ellway, Russell, Big River.....	1A
Ayers, H. D., Fairlight.....	3A	Endicott, G. L., Paddockwood.....	4A
Babauk, Olga, Norquay.....	4A	Evans, D. J., Norbury.....	4B
Bacon, Chester, Kinistino.....	3D	Evans, David, Dubuc.....	3A
Ballard, C. E., Francis.....	2A	Ewing, H. T., Wiseton.....	2B
Barber, Ray, Aurburton.....	3A	Farquaharson Bros., Zealandia.....	2B
Barker, K. H., Killdeer.....	1A	Ferguson, H. R., Sonningdale.....	3E
Barre, Henry, Duck Lake.....	3E	Ferraby, G. F., Maple Creek.....	1B
Baylise, J. N., Lost River.....	4A	Fessant, K. H., Edgeley.....	2A
Beattie, E. M., Foam Lake.....	3C	Ford, Walter, Kelvington.....	4A
Beattie, R. B., Kinistino.....	3D	Foy, Douglas, Bjorkdale.....	4A
Beck, J. D., Mawer.....	2B	Frewen, S. D., Baljennie.....	2B
Bellamy, D. W., Belbutte.....	4B	Fuhrmann, R., Netherhill.....	1B
Bennett, Wm. R., Eatonia.....	1B	Galenzoski, Ed., Edenwold.....	2A
Berg, B. O., Outlook.....	2B	Gall, D. S., Calderbank.....	1B
Biemer, V. O., Perdue.....	2B	Ganshorn, Mike, Grand Coulee.....	2A
Birrell, D. G., Fitzmaurice.....	3C	Garnier, Lucien, Frys.....	3A
Bitz, W. G., Allan.....	2B	Garraway, J. L., New Osgoode.....	4A
Blanchard, F. Jr., Duck Lake.....	3E	Gates, R. C., Milden.....	2B
Bligh, C. G., Gerald.....	3A	Gech, R. T., Kelvington.....	3C
Blot, L. G., Dafoe.....	2B	Gibb, W. G., Viscount.....	2B
Botkin, W. F., Rouleau.....	2A	Gieselman, L. E., Humboldt.....	3C
Boyd, S. E., Melfort.....	3D	Gjosund, H. L., Meacham.....	2B
Boyle, J. B., Kinistino.....	3D	Gosselin, R. E., Willowbunch.....	1A
Bradford, B. Jr., Lawston.....	1B	Grant, Irene, Edam.....	3E
Bradley, J. C., Milestone.....	2A	Gray, W., Ituna.....	3C
Brizl, M. J., Lake Alma.....	2A	Hanmer, G. W., Gowan.....	2B
Brooks, D. C., Rosthern.....	3E	Hansen, B. R., Hoffer.....	2A
Brown, E. M., Windthorst.....	2A	Hansen, E. O., Leipzig.....	1B
Brown, H. J. C., Readlyn.....	1A	Hansen, H. J., Maple Creek.....	2B
Bryson, Jack, Unity.....	3E	Hammell, H. W., Senlac.....	2B
Bue, O. A., Frontier.....	1A	Harbicht, E. A., Hughton.....	2B
Burden, I. G., Moosomin.....	3A	Harding, J. B., LaFleche.....	1A
Burns, F. G., Heward.....	2A	Harris, A. L., Star City.....	4A
Busche, R. W., Imperial.....	2B	Hart, G. R., Landis.....	2B
Calanchie, G. W., Calder.....	3B	Hawn, E. J., Maple Creek.....	1B
Cameron, Neil, Arcola.....	3A	Hecker, R. T., Piapot.....	1B
Campbell, G. M., Avonlea.....	2A	Helgason, J. V., Foam Lake.....	3C
Campbell, M. W., Fairlight.....	3A	Heugh, R. F., McKague.....	4A
Catton, E. H., Hanley.....	2B	Hickey, Lawrence, Bethune.....	2B
Chennells, P. L., Wawota.....	3A	Hicks, D. E., Marquis.....	2B
Clarke, Ray, R.R. No. 2, Regina.....	2A	Hill, L. M., Wallard.....	1A
Clemenshaw, E. M., Archydale.....	2A	Hoffman, Arthur, Annaheim.....	3C
Clewes, Sidney, East Anglia.....	4B	Hokanson, C. H., Dundurn.....	2B
Cluff, D. B., Matador.....	1B	Hornford, Harold, Elfros.....	3C
Cockburn, J. G., Turtleford.....	3E	Hudek, Ed. P., Hafford.....	3E
Codling, L. E., Plenty.....	1B	Huffman, N. G., Aberdeen.....	2B
Coleman, R. H., Abbey.....	1B	Hughes, F., Canwood.....	4B
Collinge, H., Richlea.....	1B	Hunter, J. W., Old Wives.....	1A
Comegys, H., Wakaw.....	4A	Husband, D. M., Harris.....	2B
Conn, J. K., Aberdeen.....	2B	Jackson, R. C. I., Sylvania.....	4A
Connolly, G. R., Primate.....	2B	Jackson, R. S., Riverhurst.....	2B
Cooper, L. D. W., Tugaskie.....	2B	James, Cyril, J., Waldeck.....	1B
Crane, T. N., Guernsey.....	2B	Jeeves, G. B., Deveron.....	3A
Cressman, N. W., Ceylon.....	2A	Johnston, J. L., Blaine Lake.....	3E
Currie, J. A., Bresaylor.....	3E	Johnston, W. B., Maidstone.....	3E
Dainbrough, H. P., Nut Mountain.....	4A	Jolly, R. A., Mossbank.....	1A
Decock, R. M., Wood Mountain.....	1A	Katrusak, M., Bienfait.....	2A
Deuell, W. G., Alameda.....	3A	Keeler, M. R., Plato.....	1B
Dietrick, L. E., Leroy.....	3C	Keith, J. A. A., Inchkeith.....	2A
Drackley, A. A., Birsay.....	2B	Kell, Douglas, Canwood.....	4B
Dodds, W. R. O., Craik.....	2B	Kennedy, Peter, Conquest.....	2B
Doeghe, H. E. M., Siltan.....	2B	Kirichenki, W., Langbank.....	3A
Donnelly, E. B., Indian Head.....	2A	Kozoriz, G. W., Donwell.....	3C
Donnelly, W. H., Stoughton.....	2A	Kuziak, Stephen, Canora.....	3C
Dorgan, J. A., Pangman.....	2A	Labash, M. L., Lestock.....	3C
Doyle, Wm. F., Hoosier.....	1B	Larsen, R. A., Borden.....	3E
Duffus, W. A. S., Colfax.....	2A		
Dufton, E. F., Fillmore.....	2A		
Dunbar, G. A., North Portal.....	2A		
Dunn, E. H., Burnham.....	1B		

<i>Name and Address</i>	<i>Zone</i>	<i>Name and Address</i>	<i>Zone</i>
Larson, O., Shamrock.....	1A	Purdey, Thos., Moosomin.....	3A
Layman, G. H., Speers.....	3E	Putman, M. E., Watson.....	3C
Leask, S. J., Marcelin.....	3E	Rahier, J. G., Carlton.....	3E
Legg, K. W., Willmar.....	2A	Rainnie, N. J., Alida.....	3A
Lind, L. O., Baidon.....	2A	Rehman, J. J. Jr., Verlo.....	1B
Lindgren, L. Q., Biggar.....	2B	Richards, E. E., Tako.....	2B
Lindsay, W. J., Redfield.....	3E	Richards, J. A., Lashburn.....	3E
Lintott, C. S., Raymore.....	2B	Richmond, H. J., Young.....	2B
Little, C. L., Middle Lake.....	3C	Riddell, H. A., Springwater.....	2B
Loucks, G. I., Invermay.....	3C	Roberts, H. L., Morse.....	1B
Lowenberger, G. F., Raymore.....	2B	Roles, John, Bruno.....	2B
Loyst, Francis, Demaine.....	1B	Rudolph, W. M., Gull Lake.....	2C
Lund, H. P., Innes.....	2A	Rumball, A. E., Southey.....	2C
		Rusk, M. A., White Fox.....	4A
MacDonald, A. L., Bengough.....	1A		
Machner, G. P., Spring Valley.....	1A	Sanders, J. P., Salter.....	2B
MacLean, I. C., Kamsack.....	3C	Sask. Pool Elevators Ltd.,	
Madsen, M. L., Avebury.....	4B	Special Dem. Plot, Shell Lake.....	4B
Mair, W. R., Prince.....	3E	Saul, Miles, Semans.....	2B
Malchow, O. R., Cantuar.....	2D	Sawchuk, M. N., Sheho.....	3C
Mamer, S., Lake Lenore.....	3C	Schmidt, E. M., Drake.....	2B
Manley, A. M., Midale.....	2A	Schumacher, L. G., Donavon.....	2B
Martin, E. B., Govan.....	2B	Selanders, K. I., Beaver Valley.....	1A
Martin, W. T., Wilde Rose.....	4B	Shepherd, S. F., Hearne.....	2A
Mathews, J., Duff.....	3C	Simpson, C. J., Battleford.....	3E
Mayberry, S., Eastend.....	1A	Simpson, Wesley, Paradise Hill.....	4B
Mazur, L., Torquay.....	1A	Smith, Albert, Uren.....	1B
Meinert, D. A., Instow.....	3C	Smith, B. E., Battleford.....	3E
Mellor, H. T., Garden Head.....	2C	Smith, F. T., Lashburn.....	3E
McArthur, E., Watrous.....	2B	Smith, J. H. G., Delisle.....	2B
McDonald, E., Armley.....	4A	Smith, L., Prud'homme.....	2B
McDonald, M. A., Tadmore.....	4A	Sorteberg, H., Govan.....	2B
McGhie, J., Rowletta.....	2B	Spry, D. H., Carlyle.....	3A
McGillivray.....	1A	Stan, George, Dysart.....	2B
McIntyre, Charles, Marsden.....	3E	Stenhouse, C. P., Portreeve.....	1B
McKay, D. H., Corning.....	2A	Stevenson, W. D., Birch Hills.....	3D
McKeith, W. R., Hazenmore.....	1A	Stilborn, J. R., Lorie.....	3C
McKeller, L. E., Radisson.....	3E	Stirton, G. M., Pasqua.....	2A
McLean, Duncan, Kuruki.....	3C	Storey, H. A., Girvin.....	2B
McTaggart, D. H., Ferland.....	1A	Strachan, G. A., Pleasantdale.....	3C
McWilliams, C. E., Holdfast.....	2B	Strandlund, A. G., Percival.....	3A
Mitchell, D. S., White Star.....	4A	Stringer, G. V. R., Grenfell.....	2A
Mitchell, J. C., Dahinda.....	2A	Strouts, L. K., Hanley.....	2B
Moffat, A., Cabri.....	1B	Studer, I. W., LacPellitier.....	2C
Moffat, R. R., Saltcoats.....	3B	Sutton, F. J., Marshall.....	3E
Molnar, V. L., McKim.....	3C		
Morell, Harold, Qu'Appelle.....	2A	Tanner, Frank, Hinchliffe.....	4A
Morrison, E. A., Robsart.....	1A	Tastad, N. A., Loreburn.....	2B
Morton, H. J., Gibbs.....	2B	Taylor, B. E., Gainsboro.....	2A
Moyndham, G. G., Demaine.....	1B	Thompson, A. J., Admiral.....	1A
Munn, H. H., Mankota.....	1A	Thompson, C. A., Boharn.....	2A
Murchison, C. E., Orkney.....	1A	Thompson, J. H. C., Arnold, Carnduff.....	3A
Mycock, J. S., Humboldt.....	3C	Trobak, Ole J., Lintlaw.....	4A
		Trumpour, W. A., Govanlock.....	1A
Nelson, Albert, Fir Mountain.....	1A	Tuttle, L., Beverley.....	2C
Nelson, Clarence, Instow.....	2C		
Norenberg, G., Jansen.....	3C	Unraw, J., Mullingar.....	3E
Niebergall, A. K., Neudorf.....	3A	Unterschute, Wm., Melville.....	3C
Nimetz, S., Arran.....	4A		
Nolan, J. A., Rouleau.....	2A	Vanstone, E. R., Lang.....	2A
Northgraves, E. M., Balcarres.....	3C	Vasseur, Marcel, Claydon.....	1A
		Virgin, Edith L., Foam Lake.....	3C
Odell, D. E., Canuck.....	1A	Wakefield, C. C., Lilydale.....	3E
Olive, W. H., Wolseley.....	2A	Waldner, Fred L., Langham.....	2B
		Walls, K. W., Aneroid.....	1A
Paczay, T., Paddockwood.....	4A	Wegmiller, C., Leacross.....	4A
Palmer, Joe, Southey.....	2B	Wehrhahn, G. W., Rockhaven.....	3E
Park, H. E., Rocanville.....	3A	Wells, J. W. H., Marsden.....	3E
Parson, P., Red Deer Hill.....	3D	Wesson, G. H., Maidstone.....	3E
Paulsen, H. A., Scotsburg.....	1A	Westling, A. O., Forward.....	2A
Pearson, C. E., Reward.....	2B	Wheat Pool Social & Athletic Club, Regina.....	2A
Pederson, I. A., Edgeworth.....	2A	Wiemken, P. A., Whittome.....	3D
Perdue, W. Jas., Peebles.....	2A	Widinson, W. H., Yorkton.....	3C
Perron, F., Montmartre.....	2A	Willner, O., Davidson.....	2B
Persson, P. H., Stockholm.....	3A	Wilson, Geo., Herschel.....	2B
Peterson, E., Radville.....	2A	Wilson, Jack, Lonesome Butte.....	1A
Pepper, A. J., Goodwater.....	2A	Wilson, Robert, Tugaskie.....	2B
Pilgrim, L. E. F. J., Pelly.....	4A	Witherspoon, J. A., Tregarva.....	2A
Preboy, J. W., Fox Valley.....	1B	Wood, R. E., Big River.....	4B
Preece, Seville, Bolney.....	4B	Wozny, S. G., Calder.....	3B
Price, H. M., Readlyn.....	4B		
Proctor, L. G., Mervin.....	4B	Yates, Russel, Storthoaks.....	3A
Pryce, H. E., Wawota.....	3A	Young, J. R. W., Madison.....	1B
Pollock, W. A., Saskatoon.....	2B	Youzwa, N. J., Wakaw.....	3E
Powell, W. S., Rosetown.....	2B		
Pulfer, D. R., Weyburn.....	2A	Zirk, W. J., Luseland.....	2B



CEREAL VARIETY ZONES

Discussion of Table 1

Table No. 1 is a compilation of the individual results obtained by each co-operator and is arranged by cereal variety zones. A careful study of this table will allow a co-operator to compare his results with those of his neighbours, and with those from other parts of the Province. For example, Co-operator Jack Wilson, whose test designation is A of sub-district 5 in Zone 1A * and in Pool District 2 finds that Trebi yielded at the rate of 14 bushels per acre more than O.A.C. 21. The significant difference in yield for his test is 9.4 bushels per acre, therefore, as 14 is more than 9.4, Trebi proved to be distinctly better yielding than O.A.C. 21. After examining in this way the results of his own test, Jack Wilson turns to the other test in his own sub-district, namely, that of Kenneth H. Barker, and finds that Trebi there also significantly outyielded O.A.C. 21.

Examination of results throughout the table reveals the fact that the varieties did not maintain the same relationships in different areas, and sometimes not even in tests fairly close together. Such differences may be due to several causes, the most important being differences in soil, in local weather conditions, and in date of sowing. Even a few days' difference in date of sowing on the same field may give an appreciable difference in results. However, each individual test gives an accurate indication of the comparative performance of the varieties under the conditions existing on the farm where the test was made for the year 1935. If these conditions were reasonably normal for the locality, then the results constitute a guide to the comparative value of the varieties for use on that farm.

*Zone 1 on the map has been divided for the purposes of a more detailed analysis of barley data into 1A and 2A, the boundary being a line running east northeast from the Cypress Hills elevation to the edge of Zone 2A. The southern portion is called 1A and the northern part 1B.

Table No. 1

Individual Summarized Results for all Tests arranged according to Cereal Variety Zone

CEREAL VARIETY ZONE 1A

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	*Straw strength	*Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
RUSSELL ELLWAY, BIG BEAVER											
2	3	B	Regal.....	10	21	77	3	2	50.0	27.8	14.9
"	"	"	Trebi.....	13	21	72	3	2	42.5	27.8	17.6
"	"	"	O.A.C. 21.....	6	17	77	1	1	51.0	26.5	14.8
"	"	"	Hannchen.....	13	18	77	1	3	51.5	29.5	17.1
"	"	"	Colsess.....	10	20	72	2	3	46.0	28.0	18.0
Significant Difference 5.3 bushels.											
ROBERT EDWIN GOSSELIN, WILLOWBUNCH											
2	4	A	Regal.....	50	36	100	3	3	54.0	32.8	12.3
"	"	"	Trebi.....	56	29	102	2.8	3	54.0	49.0	11.7
"	"	"	O.A.C. 21.....	46	40	100	2.6	2.4	55.0	35.8	13.1
"	"	"	Hannchen.....	56	37	102	2.6	3	56.5	38.5	12.1
"	"	"	Colsess.....	35	29	100	2.2	3	50.5	35.0	13.6
Significant Difference 5.7 bus.											
JACK WILSON, LONESOME BUTTE											
2	5	A	Regal.....	40	38	85	3	3	47.0	26.5	12.2
"	"	"	Trebi.....	56	38	85	3	3	48.0	39.8	11.4
"	"	"	O.A.C. 21.....	42	38	86	3	3	48.0	29.0	14.8
"	"	"	Hannchen.....	36	38	85	3	3	50.0	29.3	12.2
"	"	"	Colsess.....	41	38	85	3	3	46.0	31.3	12.8
Significant Difference 9.4 bus.											
KENNETH HUBERT BARKER, KILLDEER											
2	5	B	Regal.....	58	40	89	3	2	47.0	25.5	13.6
"	"	"	Trebi.....	66	31	87	1	2	47.5	38.8	14.3
"	"	"	O.A.C. 21.....	54	36	87	2	1	47.0	27.3	13.8
"	"	"	Hannchen.....	48	33	90	2	3	48.0	26.5	15.6
"	"	"	Colsess.....	57	37	85	2	2	45.5	31.5	14.9
Significant Difference 8.2 bus.											
JOSEPH B. HARDING, LAFLECHE											
2	6	B	Regal.....	....	27	89	2.4	2.2	53.5	32.5	14.0
"	"	"	Trebi.....	....	20	86	2.8	2.2	52.0	42.5	13.7
"	"	"	O.A.C. 21.....	....	32	89	1.4	2	52.0	36.5	13.1
"	"	"	Hannchen.....	....	25	92	3	2.2	55.0	40.0	14.3
"	"	"	Colsess.....	....	24	85	3	3	46.5	33.3	14.5
(Badly hailed and yield rejected).											
REMY WM. DECOCK, WOOD MOUNTAIN											
2	7	B	Regal.....	47	34	77	2.8	2	48.5	26.5	13.2
"	"	"	Trebi.....	54	26	75	1.4	1.6	47.5	34.5	13.7
"	"	"	O.A.C. 21.....	38	37	76	2	1.6	47.0	25.5	13.5
"	"	"	Hannchen.....	38	31	79	2	2.8	48.5	27.5	15.1
"	"	"	Colsess.....	36	32	76	2	3	46.0	31.0	14.5
Significant Difference 4.0 bus.											
HENRY JAMES C. BROWN, READLYN											
2	8	A	Regal.....	....	38	91	2.4	1	51.0	29.3	12.5
"	"	"	Trebi.....	....	30	91	2.2	1.4	52.0	46.5	12.7
"	"	"	O.A.C. 21.....	....	42	91	3	2.6	51.5	30.0	12.9
"	"	"	Hannchen.....	....	34	91	3	3	52.0	33.0	12.1
"	"	"	Colsess.....	....	33	91	3	3	48.0	32.3	13.6
Samples incomplete, yields rejected.											
HENRY MERVEN PRICE, READLYN											
2	8	B	Regal.....	24	33	....	3	1.2	51.0	31.5	10.4
"	"	"	Trebi.....	43	27	....	2.6	2.2	50.0	42.0	9.8
"	"	"	O.A.C. 21.....	24	35	....	3	1	52.5	29.5	11.1
"	"	"	Hannchen.....	32	29	....	3	1	53.5	35.5	9.8
"	"	"	Colsess.....	26	30	....	3	3	45.5	31.5	11.7
Significant Difference 6.0 bus.											
DONALD HAMILTON McTAGGART, FERLAND											
3	1	A	Regal.....	47	39	81	2.4	1.6	50.0	29.5	12.0
"	"	"	Trebi.....	72	30	80	1.6	1	52.0	43.8	10.9
"	"	"	O.A.C. 21.....	50	44	80	1.8	1	47.5	28.0	12.8
"	"	"	Hannchen.....	42	37	81	2	2.6	49.0	28.3	12.6
"	"	"	Colsess.....	45	32	80	2.8	3	48.0	34.0	13.5
Significant Difference 12.1 bus.											
HUGH HAMILTON MUNN, MANKOTA											
3	1	B	Regal.....	34	27	87	3	1.6	53.0	35.8	14.3
"	"	"	Trebi.....	46	26	85	2.2	1.8	51.5	49.3	13.7
"	"	"	O.A.C. 21.....	24	29	87	1.2	1.4	53.5	35.5	14.3
"	"	"	Hannchen.....	42	27	88	3	2.6	54.5	37.3	14.0
"	"	"	Colsess.....	40	26	84	3	2.8	50.0	37.3	14.6
Significant Difference 4.7 bus.											

*1=weak; 2=medium; 3=strong. Thus 2.5 indicates midway between medium and strong and 1.2 indicates slightly less weakness than 1.

Table No. 1 (Continued)—Cereal Variety Zone 1A

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
CECIL E. MURCHISON, ORKNEY											
3	2	A	Regal.....	16	19	88	2	2.2	53.5	33.5	14.9
..	Trebi.....	25	15	87	2.2	2.6	50.0	39.0	14.7
..	O.A.C. 21.....	11	20	87	1.6	1.6	51.5	29.5	14.9
..	Hannchen.....	22	19	88	1.4	1.8	54.0	34.5	15.4
..	Colsess.....	19	17	88	1.6	2	48.5	33.5	15.5
Significant Difference 5.4 bus.											
DONALD ELIAS ODELL, CANUCK											
3	3	A	Regal.....	15	20	91	3	2.2	55.0	34.3	16.1
..	Trebi.....	14	13	92	3	2.8	49.0	34.5	16.1
..	O.A.C. 21.....	6	17	91	2	1	54.5	32.3	15.4
..	Hannchen.....	16	16	92	3	2.2	54.0	34.3	16.1
..	Colsess.....	19	15.2	91	3	3	48.0	31.0	16.7
Significant Difference 4.7 bus.											
OLAF ANTHONY BUE, FRONTIER											
3	4	A	Regal.....	21	20	86	3	2	53.0	30.0	15.2
..	Trebi.....	21	17	86	3	2.6	47.5	33.0	13.8
..	O.A.C. 21.....	18	18	86	2.4	1	53.0	30.5	14.3
..	Hannchen.....	18	17	92	3	2.8	55.0	34.3	15.7
..	Colsess.....	18	18	86	3	3	45.0	29.0	15.0
Significant Difference 2.6 bus.											
MARCEL VASSEUR, CLAYDON											
3	4	B	Regal.....	13	21	....	3	2	54.0	36.3	14.6
..	Trebi.....	27	17	....	3	2.2	52.0	47.5	13.8
..	O.A.C. 21.....	15	21	....	2.4	1.2	53.5	32.3	13.9
..	Hannchen.....	23	20	....	3	3	54.5	36.5	14.2
..	Colsess.....	16	17	....	3	3	50.5	34.3	15.6
Significant Difference 6.0 bus.											
EDGAR ARTHUR MORRISON, ROBSART											
3	5	A	Regal.....	6	12	83	3	2.8	55.0	30.0	14.8
..	Trebi.....	16	12	81	3	2.2	52.0	41.0	14.6
..	O.A.C. 21.....	9	12	83	2.6	1.8	53.5	29.0	14.7
..	Hannchen.....	12	12	83	3	3	55.5	33.5	15.2
..	Colsess.....	7	11	83	3	3	51.0	31.3	16.0
Samples incomplete.											
WILSON ARTHUR TRUMPOUR, GOVANLOCK											
3	5	B	Regal.....	5	15	85	2.6	1.6	55.0	30.0	16.1
..	Trebi.....	11	15	79	2.6	2.2	47.0	32.5	16.8
..	O.A.C. 21.....	7	14	84	2.2	1	53.0	28.0	14.8
..	Hannchen.....	10	14	85	2.2	1.7	54.0	31.8	16.6
..	Colsess.....	8	15	78	2.6	3	46.5	29.8	17.6
Samples incomplete.											
SAMMIE MAYBERRY, EASTEND											
3	6	A	Regal.....	25	25	85	3	3	55.0	34.0	14.4
..	Trebi.....	42	22	83	3	3	50.5	44.3	12.2
..	O.A.C. 21.....	25	28	86	3	1	52.5	31.3	13.5
..	Hannchen.....	24	23	84	3	2.2	55.0	39.0	13.8
..	Colsess.....	34	24	85	3	3	51.0	34.3	14.5
Significant Difference 4.7 bus.											
ALBERT JOHN THOMPSON, ADMIRAL											
3	9	A	Regal.....	35	30	85	3	2.8	53.0	33.0	14.2
..	Trebi.....	54	27	82	2.8	2.2	48.0	39.3	13.2
..	O.A.C. 21.....	36	32	83	3	1	51.0	32.3	13.9
..	Hannchen.....	37	26	84	3	2.6	55.0	38.8	14.7
..	Colsess.....	41	29	83	3	3	46.0	32.3	15.1
Significant Difference 6.8 bus.											
KEITH IVAN SELANDERS, BEAVER VALLEY											
3	9	B	Regal.....	62	37	82	2.2	2	52.5	32.8	11.8
..	Trebi.....	72	31	80	1.2	2.2	50.0	43.3	12.7
..	O.A.C. 21.....	62	39	80	1.2	1	52.0	35.0	12.3
..	Hannchen.....	53	33	85	2.4	2	53.5	35.0	13.1
..	Colsess.....	52	32	....	2.8	3	47.5	32.5	13.4
Significant Difference 6.2 bus.											
WESLEY ROBERT McKEITH, HAZENMORE											
3	10	A	Regal.....	4	32	....	2.6	2.6	47.5	22.5	14.1
..	Trebi.....	16	29	....	2	1.2	39.0	27.8	16.0
..	O.A.C. 21.....	6	35	....	1.2	1	40.0	22.5	14.1
..	Hannchen.....	3	27	....	2.6	1.6	48.0	28.3	15.6
..	Colsess.....	11	29	....	2.6	2.6	39.5	27.3	15.3
Samples incomplete.											

Table No. 1 (Continued)—Cereal Variety Zone 1A

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
KELSO WESLEY WALLS, ANEROID											
3	10	B	Regal.....	32	27	82	3	2.2	51.0	29.3	13.8
..	Trebi.....	38	27	77	2.8	2.2	45.5	36.5	14.5
..	O.A.C. 21.....	30	27	76	2.2	1.2	45.5	25.8	13.8
..	Hannchen.....	29	26	82	2.4	2	53.5	34.5	14.8
..	Colsess.....	41	24	75	2.8	3	45.0	32.0	14.9

Significant Difference 7.1 bus.

RICHARD ALEXANDER JOLLY, MOSSBANK											
5	1	A	Regal.....	32	28	87	2.4	1.8	50.5	29.3	13.1
..	..	..	Trebi.....	49	25	80	2.2	2	49.0	40.0	12.7
..	..	..	O.A.C. 21.....	32	31	83	2.2	1	49.0	28.5	12.5
..	..	..	Hannchen.....	26	25	87	2.4	2.8	52.0	34.0	13.4
..	..	..	Colsess.....	35	29	83	2	3	46.0	32.5	14.2

Significant Difference 7.0 bus.

HARVEY ANDREW PAULSEN, SCOTSBURG											
5	5	A	Regal.....	..	26	86	2.2	1	52.0	32.5	13.5
..	..	..	Trebi.....	..	30	86	1.2	1.2	48.0	43.0	14.2
..	..	..	O.A.C. 21.....	..	27	86	1.6	1	51.0	31.0	13.6
..	..	..	Hannchen.....	..	25	86	1.8	1	53.5	35.0	14.5
..	..	..	Colsess.....	..	26	77	2	2.8	47.0	33.5	14.2

Severe Grasshopper Damage and Yield Discarded.

OSWALD LARSON, SHAMROCK											
5	5	B	Regal.....	54	..	82	1.8	1.6	49.5	28.3	12.5
..	..	..	Trebi.....	59	..	79	1.4	1.6	50.0	43.0	12.5
..	..	..	O.A.C. 21.....	44	..	79	1.6	1.4	48.0	28.0	13.0
..	..	..	Hannchen.....	37	..	82	1.8	1.8	49.0	29.3	14.0
..	..	..	Colsess.....	35	..	78	1.6	2	45.0	30.5	13.9

Significant Difference 8.7 bus.

JOHN ROSS ANDERSON, COURVAL											
5	6	A	Regal.....	25	24	..	..	..	47.0	24.5	12.3
..	..	..	Trebi.....	36	21	..	..	..	44.5	33.0	13.4
..	..	..	O.A.C. 21.....	27	25	..	..	..	48.0	26.8	12.2
..	..	..	Hannchen.....	41	24	..	..	..	51.5	29.8	13.1
..	..	..	Colsess.....	28	21	..	..	..	41.0	26.8	14.0

Significant Difference 5.5 bus.

JOHN WILDER HUNTER, OLD WIVES											
5	6	B	Regal.....	37	37	..	2.6	2.8	52.5	32.0	12.0
..	..	..	Trebi.....	50	34	..	1.8	2.8	50.0	44.5	12.0
..	..	..	O.A.C. 21.....	25	39	..	2	2	53.0	34.8	13.0
..	..	..	Hannchen.....	28	34	..	3	3	53.5	35.0	13.1
..	..	..	Colsess.....	41	32.4	..	3	3	45.5	31.5	13.0

Significant Difference 12.1 bus.

GEORGE PETER MACHNER, SPRING VALLEY											
6	4	B	Regal.....	65	41	86	2.8	2.8	53.0	33.5	13.0
..	..	..	Trebi.....	66	34	78	2	3	48.5	43.8	13.4
..	..	..	O.A.C. 21.....	66	44	84	1.8	1	50.0	34.3	14.5
..	..	..	Hannchen.....	67	31	86	2.2	3	54.0	38.0	14.4
..	..	..	Colsess.....	54	35	78	3	3	47.5	34.8	14.0

Significant Difference 15.5 bus.

ED. M. MCGILLIVARY											
3	10	Key	Regal.....	20	26	..	3	2	54.0	29.3	14.4
..	..	..	Trebi.....	29	24	..	2.2	2.6	51.0	40.0	14.5
..	..	..	O.A.C. 21.....	18	27	..	2.2	1	51.0	27.5	14.7
..	..	..	Hannchen.....	19	22	..	3	2.8	56.0	32.5	15.0
..	..	..	Colsess.....	23	25	..	3	3	48.5	31.5	15.6

Significant Difference 4.2 bus.

Tests Discarded on Account of Damage by Pests, Hail or Other Causes

2	2	A	Willard Schuler, Gladmar	3	6	B	Calvin Bentz, Ravenscrag
2	3	A	Edwin R. Mortenson, Buffalo Gap	3	7	A	Oliver McCuaig, Eastbrook
2	4	B	Gaston Marcel Thomasset, Fife Lake	3	7	B	Wilbert Henry Lewis, Eastend
2	6	A	Albert Nelson, Fir Mountain	5	1	B	Charles Ivor Tollefson, Ettington
2	7	A	Neil Morrison Batty, Limerick	5	2	A	James R. Lazenby, St. Boswells
2	9	B	Allan Leroy MacDonald, Bengough	5	2	B	Raymond Pelletier, Gravelbourg
3	2	B	Lewis Milton Hill, Wallard	3	8	Key	Stanley Murch, Shaunavon
3	3	B	Ernest George Nevada, Climax				

Note.—The figures and letters before each name represent, in order, the District, Sub-District, and Test Designation.

Table No. 1 (Continued)

CEREAL VARIETY ZONE 1B

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
ROBERT TIMOTHY HECKER, PIAPOT											
4	1	B	Regal.....	18	16	89	3	3	52.0	28.5	13.3
..	Trebi.....	20	13	84	3	3	50.5	39.3	15.0
..	O.A.C. 21.....	14	12	85	2	1	53.0	30.5	14.4
..	Hannchen.....	22	16	89	3	3	54.0	34.5	15.2
..	Colsess.....	16	14	82	3	3	48.0	30.0	14.5
Significant Difference 2.3 bus.											
OWEN ROGER MALCHOW, CANTAU											
4	3	B	Regal.....	45	29	90	3	2	50.0	30.3	12.8
..	Trebi.....	49	26	85	3	2.2	47.0	35.5	13.3
..	O.A.C. 21.....	35	31	90	2.2	1.2	49.0	28.3	13.2
..	Hannchen.....	50	29	91	3	2	54.5	37.5	13.5
..	Colsess.....	34	29	86	3	2.8	47.0	32.8	13.9
Significant Difference 5.2 bus.											
JOHN JASON REBMAN, JR., VERLO											
4	4	B	Regal.....	41	30	...	3	3	49.0	27.3	13.1
..	Trebi.....	33	26	...	3	3	46.0	35.0	13.9
..	O.A.C. 21.....	13	30	...	3	2.4	45.0	26.0	13.7
..	Hannchen.....	26	23	...	2.4	2.4	50.0	30.5	15.2
..	Colsess.....	32	27	...	3	3	45.0	30.0	15.0
Significant Difference 7.9 bus.											
ALEX MOFFAT, CABRI											
4	5	A	Regal.....	55	37	86	..	..	49.0	28.8	12.5
..	Trebi.....	75	40	88	..	..	50.5	42.0	12.9
..	O.A.C. 21.....	48	47	88	..	..	50.0	28.5	12.5
..	Hannchen.....	54	36	90	..	..	49.0	29.8	14.4
..	Colsess.....	45	34	86	..	..	48.0	33.5	13.8
Significant Difference 8 bus.											
CHARLES DUNCAN AHLBERG, GOLDEN PRAIRIE											
4	6	A	Regal.....	7	16	76	3	3	49.0	28.5	15.8
..	Trebi.....	11	13	80	2	1.2	48.0	31.8	15.9
..	O.A.C. 21.....	7	12	80	1.8	1.2	51.0	27.5	14.8
..	Hannchen.....	11	17	83	3	3	51.0	29.5	16.5
..	Colsess.....	12	12	76	3	3	42.0	27.5	16.1
Significant Difference 3.1 bus.											
HAROLD J. HANSON, MAPLE CREEK											
4	6	B	Regal.....	11	18	...	3	2.8	55.0	33.5	15.2
..	Trebi.....	22	15	...	3	2.8	50.0	40.3	13.3
..	O.A.C. 21.....	10	18	...	3	2	53.5	30.3	15.4
..	Hannchen.....	15	18	...	3	3	55.0	27.3	14.8
..	Colsess.....	9	12	...	3	3	50.0	32.5	16.2
Damaged Samples Incomplete.											
JOSEPH WM. PREBOY, FOX VALLEY											
4	7	A	Regal.....	5	15	...	2.8	2.6	53.0	30.0	16.4
..	Trebi.....	10	13	...	2.6	..	47.5	34.0	15.3
..	O.A.C. 21.....	2	13	...	2.6	..	54.0	31.3	15.3
..	Hannchen.....	6	14	...	2.8	2.8	53.5	32.5	16.1
..	Colsess.....	9	13	...	2.6	..	47.0	27.8	16.0
Significant Difference 4.1 bus.											
CHAS. PETER STENHOUSE, PORTREEVE											
4	9	A	Regal.....	41	35	...	3	2.6	46.0	29.8	9.9
..	Trebi.....	44	28	...	3	3	46.5	42.0	9.7
..	O.A.C. 21.....	36	41	...	3	2	49.5	32.0	9.9
..	Hannchen.....	49	34	...	3	3	50.0	35.0	9.4
..	Colsess.....	32	31	...	3	3	44.5	33.3	10.5
Significant Difference 7.4 bus.											
HAROLD DUTTON, HAZLET											
4	10	A	Regal.....	15	...	...	2.2	..	50.0	28.5	14.9
..	Trebi.....	22	...	...	3	..	48.0	41.8	13.9
..	O.A.C. 21.....	12	...	...	2.6	..	46.5	24.5	14.3
..	Hannchen.....	21	...	...	2.8	..	52.0	32.5	15.3
..	Colsess.....	18	...	...	2.8	..	43.5	30.8	15.4
Samples Incomplete.											
ROBERT HAROLD COLEMAN, ABBEY											
4	10	B	Regal.....	9	22	...	3	2.8	44.0	23.0	16.5
..	Trebi.....	8	20	...	3	3	45.5	33.3	17.4
..	O.A.C. 21.....	8	20	...	2.2	2	43.5	22.5	16.4
..	Hannchen.....	8	21	...	3	2.6	49.5	27.0	17.2
..	Colsess.....	11	21	...	3	3	41.0	28.5	17.6
Significant Difference 5.5 bus.											

Table No. 1 (Continued)—Cereal Variety Zone 1B

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
CYRIL J. JAMES, WALDECK											
5	4	A	Regal.....	45	36	88	2.8	2.8	51.0	36.0	10.3
..	Trebi.....	66	32	83	2.8	2.8	51.0	46.3	9.7
..	O.A.C. 21.....	48	42	84	2.2	2	52.0	32.3	10.8
..	Hannchen.....	53	32	91	2.8	3	55.5	39.0	8.7
..	Colsess.....	43	33	80	3	3	47.5	33.0	12.3
Significant Difference 7.6 bus.											
EUSTACE HEDLEY DUNN, BURNHAM											
5	4	B	Regal.....	25	28	98	3	3	53.0	35.0	15.3
..	Trebi.....	42	29	89	3	3	48.5	42.5	13.7
..	O.A.C. 21.....	29	29	94	2.2	2	50.5	31.5	14.4
..	Hannchen.....	39	26	100	3	3	54.0	39.5	15.3
..	Colsess.....	32	30	86	3	3	47.5	36.0	15.3
Significant Difference 5.1 bus.											
ALBERT SMITH, UREN											
5	9	A	Regal.....	41	35	81	3	2	53.0	32.8	15.4
..	Trebi.....	50	34	79	2.2	2.2	45.5	34.8	14.8
..	O.A.C. 21.....	41	35	81	3	1	50.0	30.0	13.4
..	Hannchen.....	53	..	81	2	3	53.5	37.5	15.8
..	Colsess.....	53	35	76	3	2	45.0	32.3	15.7
Significant Difference 7.1 bus.											
BOWYER BRADFORD, JR., LAWSON											
5	9	B	Regal.....	21	27	85	2.4	1.4	53.0	32.0	14.1
..	Trebi.....	23	28	84	2	2.6	47.0	37.5	13.5
..	O.A.C. 21.....	27	30	85	..	2.4	49.0	27.8	13.9
..	Hannchen.....	27	29	86	3	2	55.0	37.8	15.0
..	Colsess.....	22	28	82	3	2	46.5	33.8	14.9
Significant Difference 9.8 bus.											
HAROLD LLOYD ROBERTS, MORSE											
5	10	A	Regal.....	19	26	..	3	3	52.0	34.5	14.9
..	Trebi.....	22	24	..	3	3	48.0	42.8	14.4
..	O.A.C. 21.....	18	28	..	3	2	51.0	35.5	14.1
..	Hannchen.....	24	25	..	3	3	53.0	38.8	15.1
..	Colsess.....	18	25	..	3	3	47.0	34.5	15.6
Significant Difference 7.5 bus.											
DAVID STEWART GALL, CALDERBANK											
5	10	B	Regal.....	43	32	84	3	3	53.5	35.8	14.8
..	Trebi.....	63	30	82	2	2	51.5	43.6	12.4
..	O.A.C. 21.....	47	33	83	2.6	2	53.5	35.0	13.9
..	Hannchen.....	53	33	82	3	2	54.5	39.5	14.1
..	Colsess.....	41	30	76	1	1	49.0	35.5	14.9
Significant Difference 7.8 bus.											
GEORGE GORDON MOYNHAM, DEMAINE											
10	3	A	Regal.....	20	28	81	3	3	54.0	36.3	13.5
..	Trebi.....	34	28	80	3	3	51.5	39.0	13.9
..	O.A.C. 21.....	26	27	82	2.3	1.8	55.0	35.0	14.7
..	Hannchen.....	34	27	84	3	3	56.0	38.8	15.6
..	Colsess.....	31	29	81	3	3	51.0	34.3	16.0
Damaged and Samples Incomplete.											
MISS FRANCES LOYST, DEMAINE											
10	3	B	Regal.....	30	28	91	3	3	54.0	32.0	12.2
..	Trebi.....	38	21	92	3	3	52.0	43.5	13.2
..	O.A.C. 21.....	39	32	89	2.4	2	53.5	33.8	13.4
..	Hannchen.....	40	23	92	3	3	56.0	36.8	13.4
..	Colsess.....	27	23	90	3	3	47.5	33.8	14.5
Samples Incomplete.											
DOUGLAS BEATY CLUFF, MATADOR											
11	1	A	Regal.....	31	28	78	3	3	54.5	35.8	14.7
..	Trebi.....	38	21	77	1	1	51.0	42.5	14.2
..	O.A.C. 21.....	28	25	76	2	1	51.5	29.8	14.1
..	Hannchen.....	42	28	78	3	3	54.5	35.8	15.8
..	Colsess.....	26	28	78	3	3	48.5	33.8	15.4
Significant Difference 4.8 bus.											
ELEANOR MILDRED AKISTER, TUBEROSE											
11	1	B	Regal.....	40	35	96	3	2.6	54.0	35.0	12.5
..	Trebi.....	59	25	96	2.2	3	55.5	48.8	12.7
..	O.A.C. 21.....	34	40	93	3	1	54.5	33.8	13.0
..	Hannchen.....	51	34	97	3	3	56.5	39.0	12.3
..	Colsess.....	33	26	97	2.6	2.6	49.5	34.0	14.1
Significant Difference 8.4 bus.											

Table No. 1 (Continued)—Cereal Variety Zone 1B

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
MORTON R. KEELER, PLATO											
11	2	B	Regal.....	49	41	....	3	3	51.0	34.0	12.5
..	Trebi.....	67	32	....	1.6	1.6	51.0	45.3	13.0
..	O.A.C. 21.....	31	43	....	1.4	1.2	49.5	30.0	12.7
..	Hannchen.....	44	34	....	3	3	52.0	37.0	13.8
..	Colsess.....	44	34	....	2.2	2.6	47.5	32.3	13.1
Significant Difference 6.5 bus.											
HARRY COLLINGE, RICHLEA											
11	3	A	Regal.....	15	22	....	..	..	54.0	31.8	14.9
..	Trebi.....	26	....	....	..	..	49.5	42.5	12.8
..	O.A.C. 21.....	13	....	....	..	..	50.0	26.3	13.6
..	Hannchen.....	19	14	....	..	..	55.0	34.0	15.1
..	Colsess.....	19	....	....	..	..	46.5	34.0	14.8
Significant Difference 4.8 bus.											
JOHN RANDOLPH WESLEY YOUNG, MADISON											
11	3	B	Regal.....	37	32	92	3	2.6	51.5	36.8	13.0
..	Trebi.....	51	28	84	2	2	51.0	53.0	13.2
..	O.A.C. 21.....	32	34	92	2.4	2	52.0	35.0	13.0
..	Hannchen.....	45	30	92	3	2	53.5	40.8	12.5
..	Colsess.....	38	29	84	3	3	48.0	34.5	14.3
Significant Difference 11.2 bus.											
WM. ROBERT BENNETT, EATONIA											
11	4	B	Regal.....	11	17	....	3	3	54.0	28.0	16.0
..	Trebi.....	15	15	....	3	3	44.5	32.3	15.8
..	O.A.C. 21.....	10	13	....	3	3	52.5	25.3	15.7
..	Hannchen.....	11	15	....	3	3	54.0	30.3	16.3
..	Colsess.....	15	14	....	3	3	45.5	28.3	16.0
Significant Difference 5.1 bus.											
RAYMOND FUHRMANN, NETHERHILL											
11	6	A	Regal.....	32	25	84	3	3	54.0	31.8	14.1
..	Trebi.....	39	24	82	3	3	51.0	42.0	14.0
..	O.A.C. 21.....	29	22	83	3	1	52.5	29.5	14.2
..	Hannchen.....	34	22	84	3	3	54.5	34.8	14.8
..	Colsess.....	32	23	82	3	3	48.0	33.0	14.6
Significant Difference 4.9 bus.											
LLEWELLYN EDWIN CODLING, PLENTY											
11	9	B	Regal.....	62	....	....	..	..	53.0	35.5	14.0
..	Trebi.....	99	....	....	..	..	53.0	50.0	14.0
..	O.A.C. 21.....	69	....	....	..	..	53.5	39.0	15.4
..	Hannchen.....	90	....	....	..	..	55.0	36.0	14.5
..	Colsess.....	52	....	....	..	..	48.5	39.3	15.3
Samples Incomplete.											
WM. P. DOYLE, HOOSIER											
11	10	B	Regal.....	....	24	86	2.6	1.2	58.0	32.3	16.4
..	Trebi.....	25	27	82	1.4	1	48.0	33.5	16.9
..	O.A.C. 21.....	12	24.2	83	1.2	1	53.0	25.8	16.1
..	Hannchen.....	....	22	88	2.4	1	56.0	32.8	17.5
..	Colsess.....	21	24	77	2	3	48.5	31.0	16.8
Damaged by Hail.											

Tests Discarded on Account of Damage by Pests, Hail or Other Causes

4 2 A	Elmer Joseph Hawn, Maple Creek	11 5 A	Miss Verna Moyer, Alsask
4 2 B	Gordon Frederick Ferraby, Maple Creek	11 5 B	Sheldon Lewis Elliot, Flaxcombe
4 5 B	Jack Clayton Godwin, Pennant	11 6 B	Douglas Lloyd Coyle, Kindersley
4 7 B	Frank Xavier Lannan, Richmond	11 9 A	John Alexander Nixon, Coleville
4 8 A	Miss Rose Lydia Frei, Leader	11 10 A	Earl Naffziger, Smiley
4 8 B	Victor Julius Ebel, Leader	4 2 Key	Cecil Ford, Maple Creek
4 9 B	Charles Ernest Howes, Sceptre	4 2 Key	G. L. Hammond, Maple Creek
11 4 A	Dyson Revitt, Jr., Eyre	11 5 Key	W. H. Hargey, Flaxcombe

Note.—The figures and letters before each name represent, in order, the District, Sub-District, and Test Designation.

Table No. 1 (Continued)

CEREAL VARIETY ZONE 2A

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
BURTON EDWARD TAYLOR, GAINSBORO											
1	1	A	Regal.....	23	36	....	3	3	35.0	17.3	12.8
..	Trebi.....	30	30	....	2	2	40.0	25.0	14.1
..	O.A.C. 21.....	26	40	....	2	2	41.0	20.5	12.8
..	Peatland.....	12	34	....	3	3	46.0	21.8	15.0
..	Colsess.....	22	32	....	3	3	34.0	20.0	14.9
Significant Difference 4.8 bus.											
KEITH WILLIAM LEGG, WILLMAR											
1	4	A	Regal.....	27	30	80	3	3	37.5	16.5	12.6
..	Trebi.....	42	28	79	3	3	42.5	27.3	13.7
..	O.A.C. 21.....	21	36	79	2	1.2	38.5	20.0	12.6
..	Peatland.....	27	32	....	3	3	52.0	25.8	15.9
..	Colsess.....	25	30	78	3	3	43.0	21.0	14.3
Significant Difference 3.6 bus.											
ALBERT MILLER MANLEY, MIDALE											
1	6	A	Regal.....	30	24	73	3	3	45.0	25.0	13.4
..	Trebi.....	32	20	73	3	3	48.0	36.5	14.5
..	O.A.C. 21.....	28	25	73	3	3	48.0	25.0	13.7
..	Peatland.....	14	19	74	2	1	49.0	22.6	17.1
..	Colsess.....	23	21	73	3	2	42.0	27.5	14.7
Samples Incomplete.											
LEO MAZUR, TORQUAY											
1	6	B	Regal.....	21	22	....	..	..	51.0	28.3	16.1
..	Trebi.....	43	20	....	..	..	48.0	33.0	17.0
..	O.A.C. 21.....	20	23	....	..	..	50.0	26.0	15.4
..	Peatland.....	4	21	....	..	..	52.0	21.5	17.8
..	Colsess.....	32	20	....	..	..	44.3	28.0	16.2
Samples Incomplete.											
BERNARD R. HANSEN, HOFFER											
1	7	A	Regal.....	31	23	78	3	3	50.5	28.8	12.9
..	Trebi.....	27	22	78	3	3	51.0	37.8	14.3
..	O.A.C. 21.....	23	25	78	3	2.8	50.0	23.8	12.7
..	Peatland.....	13	20	84	3	1.4	53.0	23.5	16.7
..	Colsess.....	25	23	78	3	3	46.0	28.5	14.3
Significant Difference 4.6 bus.											
AUBURN JAMES PEPPER, GOODWATER											
1	7	B	Regal.....	45	25	....	3	3	50.5	31.0	13.8
..	Trebi.....	36	22	....	2.8	2.8	50.0	40.5	13.7
..	O.A.C. 21.....	27	22	....	3	1.8	52.0	30.5	14.2
..	Peatland.....	....	21	....	3	3	....	....	....
..	Colsess.....	26	21	....	3	3	46.0	30.5	14.8
Damaged by Hail, Samples Incomplete.											
DOUGLAS RUSSEL PULFER, WEYBURN											
1	8	A	Regal.....	39	41	84	2.2	2.6	48.0	26.8	11.2
..	Trebi.....	63	35	84	2.2	1.8	50.5	42.0	11.6
..	O.A.C. 21.....	41	43	84	2	2	49.5	26.5	11.7
..	Peatland.....	36	37	86	3	2.8	53.0	27.5	14.6
..	Colsess.....	37	34	82	1	3	42.0	26.0	12.6
Significant Difference 5.2 bus.											
HAROLD PETER LUND, INNES											
1	8	B	Regal.....	10	23	78	2.4	1.8	47.0	23.5	13.4
..	Trebi.....	17	22	74	1.6	2.2	46.5	36.3	13.6
..	O.A.C. 21.....	7	23	74	1.2	1.4	47.5	22.8	14.1
..	Peatland.....	4	22	78	2.6	1.4	52.0	26.3	16.4
..	Colsess.....	16	25	74	2.2	2.8	42.0	25.8	14.4
Significant Difference 4.5 bus.											
W. H. DONNELLY, STOUGHTON											
1	9	B	Regal.....	16	27	85	3	2.6	41.5	18.5	13.3
..	Trebi.....	22	26	85	1.2	1.8	42.0	28.0	14.0
..	O.A.C. 21.....	12	28	85	3	1.6	39.5	17.8	12.9
..	Peatland.....	15	26	92	3	1.6	52.0	26.3	16.7
..	Colsess.....	14	26	77	2.2	3	38.0	20.5	15.0
Significant Difference 4.0 bus.											
MATT JOHN BRILZ, LAKE ALMA											
2	1	A	Regal.....	23	20	74	2.8	1.6	52.0	30.0	13.8
..	Trebi.....	24	19	74	1.2	1.8	52.5	43.0	14.4
..	O.A.C. 21.....	23	20	74	2.4	1.4	52.0	27.3	13.8
..	Hannchen.....	25	21	76	2.8	2.8	52.5	32.0	14.5
..	Colsess.....	27	20	72	1.2	2.4	46.5	30.8	14.6
Significant Difference 4.6 bus.											

Table No. 1 (Continued)—Cereal Variety Zone 2A

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
ELVIN PETERSON, RADVILLE											
2	1	B	Regal.....	24	29	....	2	2	49.5	26.8	11.1
..	Trebi.....	29	26	....	1	1	49.5	42.3	10.6
..	O.A.C. 21.....	21	32	....	2	1	50.0	27.5	11.9
..	Hannchen.....	..	26	....	3	..	....	....	....
..	Colsess.....	25	29	....	1	3	45.0	31.3	12.4
Samples Incomplete.											
NORMAN W. CRESSMAN, CEYLON											
2	2	B	Regal.....	20	24	82	3	3	47.0	22.5	12.6
..	Trebi.....	21	30	68	1	1	42.0	28.0	13.6
..	O.A.C. 21.....	18	31	78	2	1	45.5	24.0	13.3
..	Hannchen.....	22	23	82	3	1	51.0	28.5	13.6
..	Colsess.....	19	25	68	3	2	42.0	25.8	14.7
Significant Difference 2.4 bus.											
IVEN A. PEDERSON, EDGEWORTH											
2	9	A	Regal.....	34	36	82	2.2	2	46.5	25.0	12.2
..	Trebi.....	45	29	81	3	3	46.0	34.3	16.3
..	O.A.C. 21.....	33	32	81	3	1	46.0	26.5	12.6
..	Hannchen.....	33	30	87	1	2	48.0	26.8	13.9
..	Colsess.....	33	33	82	2.4	2	42.0	28.8	14.7
Significant Difference 8.7 bus.											
JOHN ANDREW DORGAN, PANGMAN											
2	10	A	Regal.....	46	43	....	1.2	2	48.5	27.8	12.2
..	Trebi.....	63	34	....	1	2	50.5	44.0	13.0
..	O.A.C. 21.....	44	44	....	1	2	51.0	30.6	12.7
..	Hannchen.....	48	38	....	1	2.6	51.0	30.0	13.9
..	Colsess.....	50	35	....	1.6	3	46.0	30.8	13.9
Significant Difference 7.2 bus.											
ARCHIE OLIVER WESTLING, FORWARD											
2	10	B	Regal.....	14	28	....	2.2	2	42.0	22.0	12.2
..	Trebi.....	39	29	....	1.2	2	45.0	32.5	13.1
..	O.A.C. 21.....	14	32	....	1.6	1.4	42.0	22.0	12.3
..	Hannchen.....	30	35	....	1	2.8	45.0	25.0	13.2
..	Colsess.....	21	30	....	2.2	3	39.0	24.5	13.8
Significant Difference 5.7 bus.											
EDWARD M. CLEMENSHAW, ARCHYDAL											
5	7	A	Regal.....	20	32	....	3	3	40.5	20.5	10.7
..	Trebi.....	57	29	....	2	2	46.5	38.8	11.6
..	O.A.C. 21.....	27	35	....	3	2.2	44.0	24.5	11.8
..	Hannchen.....	23	31	....	3	3	49.0	30.0	12.2
..	Colsess.....	33	29	....	3	3	40.5	27.5	12.6
Samples Incomplete.											
CLARKE A. THOMPSON, BOHARM											
5	7	B	Regal.....	22	31	80	3	1.8	51.0	28.0	12.6
..	Trebi.....	42	28	79	2.6	2	48.0	39.5	12.3
..	O.A.C. 21.....	27	36	79	2.2	1	49.0	28.8	12.3
..	Hannchen.....	36	29	81	3	3	51.0	32.0	12.4
..	Colsess.....	30	29	79	3	2.8	45.0	31.3	13.7
Significant Difference 4.0 bus.											
W. A. SETH DUFFUS, COLFAX											
6	1	B	Regal.....	34	38	....	2.2	2.8	46.0	25.0	11.6
..	Trebi.....	55	30	....	1.2	2	47.0	42.3	12.6
..	O.A.C. 21.....	31	44	....	1.4	1.6	47.5	27.0	12.4
..	Hannchen.....	24	36	....	1.6	3	49.0	28.8	13.1
..	Colsess.....	40	30	....	2.4	3	45.0	29.3	14.0
Significant Difference 5.3 bus.											
CLARENCE ELMER BALLARD, FRANCIS											
6	2	B	Regal.....	32	40	81	3	3	43.0	22.5	10.6
..	Trebi.....	56	31	80	1	2	49.0	42.5	11.8
..	O.A.C. 21.....	35	41	81	3	2	45.0	24.5	11.6
..	Hannchen.....	41	34	86	1	2	46.0	31.3	12.4
..	Colsess.....	40	36	79	3	3	44.0	29.5	10.9
Significant Difference 5.3 bus.											
JOHN A. NOLAN, ROULEAU											
6	3	A	Regal.....	20	37	....	2.8	2	45.5	26.5	11.3
..	Trebi.....	61	34	....	1.2	2	48.0	42.3	12.1
..	O.A.C. 21.....	26	42	....	1.6	1	46.5	28.5	11.9
..	Hannchen.....	28	33	....	1.2	3	47.5	32.3	12.3
..	Colsess.....	32	34	....	2	3	42.0	30.0	13.2
Significant Difference 6.4 bus.											

Table No. 1 (Continued)—Cereal Variety Zone 2A

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
JAMES C. BRADLEY, MILESTONE											
6	3	B	Regal.....	16	40	....	2.4	2.8	40.0	21.0	10.4
..	Trebi.....	37	35	....	1	2.2	48.0	42.0	10.8
..	O.A.C. 21.....	18	42	....	1.8	2.2	44.0	26.0	11.5
..	Hannchen.....	24	34	....	1.8	3	48.0	30.0	11.1
..	Colsess.....	18	35	....	2.4	3	41.0	27.8	12.9
Significant Difference 9.1 bus.											
GLEN MILLER CAMPBELL, AVONLEA											
6	4	A	Regal.....	62	32	86	3	2	53.5	34.3	12.4
..	Trebi.....	62	26	85	1.6	2.6	51.0	45.8	12.8
..	O.A.C. 21.....	54	32	86	1.8	1	52.5	36.0	13.1
..	Hannchen.....	58	26	88	2.4	2	53.0	38.5	13.5
..	Colsess.....	54	28	85	1.8	3	48.5	35.0	13.6
Significant Difference 5.6 bus.											
LLOYD OSCAR LIND, BAILDON											
6	5	A	Regal.....	....	31	87	3	2	49.0	28.5	12.1
..	Trebi.....	....	28	85	2.4	....	47.0	38.0	11.9
..	O.A.C. 21.....	....	32	84	3	1.6	47.5	29.5	12.1
..	Hannchen.....	....	26	87	3	3	50.0	34.3	12.6
..	Colsess.....	....	29	78	3	3	44.0	30.5	13.1
Severe Grasshopper Damage, Samples Discarded.											
G. M. STIRTON, PASQUA											
6	5	B	Regal.....	19	40	83	3	1	49.5	29.0	11.9
..	Trebi.....	79	35	80	1	2	50.0	45.3	12.0
..	O.A.C. 21.....	38	42	82	2	2	50.0	31.5	12.4
..	Hannchen.....	37	40	85	3	3	51.0	34.3	12.1
..	Colsess.....	53	35	78	3	3	46.5	32.8	13.0
Significant Difference 7.6 bus.											
S. F. SHEPHERD											
6	6	A	Regal.....	26	28	77	3	3	47.0	25.5	13.2
..	Trebi.....	36	32	73	2.6	1.8	42.0	31.0	13.0
..	O.A.C. 21.....	24	36	74	2.4	1	42.5	21.5	12.1
..	Hannchen.....	25	27	78	3	3	49.5	30.3	12.1
..	Colsess.....	27	29	72	3	3	41.0	27.8	13.8
Significant Difference 5.5 bus.											
EDW. GALENZOSKI, EDENWOLD											
6	7	A	Regal.....	44	36	87	2	2.4	53.0	34.0	12.0
..	Trebi.....	53	33	82	1.8	2	52.0	45.0	11.8
..	O.A.C. 21.....	38	39	87	1.8	2.2	53.0	31.5	12.8
..	Hannchen.....	46	35	87	2.6	2.6	52.5	34.5	12.7
..	Colsess.....	35	32	87	1.6	2.6	48.5	33.0	13.9
Significant Difference 6.5 bus...											
RAY CLARKE, R.R. No. 2, REGINA											
6	7	B	Regal.....	19	37	....	2.8	2.6	47.0	24.8	11.2
..	Trebi.....	54	34	78	2	2	50.5	42.3	12.1
..	O.A.C. 21.....	24	41	....	2.4	2	48.5	26.0	12.1
..	Hannchen.....	33	35	....	2.2	2.8	50.5	29.3	11.8
..	Colsess.....	27	33	78	2.2	3	48.5	29.5	13.3
Significant Difference 4.9 bus.											
ERNEST B. DONNELLY, INDIAN HEAD											
6	8	A	Regal.....	23	37	83	1.4	1.8	42.0	19.3	12.6
..	Trebi.....	29	38	82	1.2	2	43.5	29.3	13.7
..	O.A.C. 21.....	19	39	83	2.2	1	44.5	22.3	12.7
..	Hannchen.....	26	34	85	2.4	2.4	46.0	25.8	14.3
..	Colsess.....	26	35	77	1.2	2.2	40.5	24.5	14.1
Significant Difference 5.6 bus.											
KEITH H. FESSANT, EDGELEY											
6	8	B	Regal.....	46	32	86	..	..	47.5	23.5	12.2
..	Trebi.....	56	36	86	..	..	47.5	36.3	13.6
..	O.A.C. 21.....	49	35	86	..	..	49.0	25.0	12.3
..	Hannchen.....	47	30	92	..	..	50.5	30.3	14.1
..	Colsess.....	50	33	86	..	..	44.0	25.0	13.9
Significant Difference 7.8 bus.											
JAS. A. WITHERSPOON, TREGARVA											
6	10	A	Regal.....	56	47	....	1	3	49.5	28.5	13.1
..	Trebi.....	76	41	....	1	3	50.5	40.0	13.4
..	O.A.C. 21.....	64	51	....	1.4	2.2	51.5	32.8	13.4
..	Hannchen.....	47	44	....	1	3	51.5	53.3	14.3
..	Colsess.....	57	39	....	1.6	3	45.5	29.0	14.0
Significant Difference 5.1 bus.											

Table No. 1 (Continued)—Cereal Variety Zone 2A

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seedling to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in percentage
WHEAT POOL SOCIAL AND ATHLETIC CLUB, REGINA											
6	7	C	Regal.....	44	37	87	2.4	2.6	49.5	25.8	10.7
..	Trebi.....	58	34	83	3	3	52.5	45.0	11.6
..	O.A.C. 21.....	44	40	88	2.8	2.2	51.0	27.3	11.2
..	Hannchen.....	39	34	90	2	3	52.0	31.3	13.0
..	Colless.....	41	36	84	2.6	3	46.0	30.0	12.2
Significant Difference 6.5 bus.											
J. A. ARNOLD KEITH, INCHKEITH											
7	4	A	Regal.....	12	36	91	2.4	2.6	33.0	15.5	12.2
..	Trebi.....	16	32	90	1.4	2.2	38.5	26.5	13.5
..	O.A.C. 21.....	12	38	91	2.4	2.2	36.0	17.0	12.7
..	Peatland.....	12	34	103	3	2.8	52.0	27.5	16.7
..	Colless.....	10	32	90	2.2	2.8	32.5	17.3	14.4
Significant Difference 2.5 bus.											
MISS ETHEL MAY BROWN, WINDTHORST											
7	4	B	Regal.....	30	42	87	2	2.8	42.5	19.8	12.1
..	Trebi.....	48	34	87	3	2	47.5	35.3	14.0
..	O.A.C. 21.....	27	45	87	1	1	43.0	21.3	14.1
..	Peatland.....	21	40	90	3	1	51.0	22.3	15.7
..	Colless.....	37	36	84	3	3	42.5	23.5	13.5
Significant Difference 3.4 bus.											
DONALD HAMILTON McKAY, CORNING											
7	5	A	Regal.....	12	30	79	3	2.8	40.5	17.0	14.0
..	Trebi.....	25	29	79	2.8	2	42.0	30.0	14.6
..	O.A.C. 21.....	13	31	79	1.4	1.8	38.0	18.0	14.6
..	Peatland.....	11	30	...	3	2	50.0	24.5	16.4
..	Colless.....	15	26	75	2	3	36.0	20.8	15.1
Significant Difference 3.5 bus.											
ELMER FRANCIS DUFTON, FILLMORE											
7	5	B	Regal.....	32	35	82	2.4	2.4	43.0	19.5	11.8
..	Trebi.....	39	34	81	2	1.4	47.5	37.8	13.8
..	O.A.C. 21.....	30	36	81	1.8	2.4	44.0	22.8	12.9
..	Peatland.....	31	36	85	2.2	2.4	53.0	24.0	15.6
..	Colless.....	42	34	79	1.8	2	41.5	26.3	14.5
Significant Difference 7.9 bus.											
FRANK PERRON, MONTMARTRE											
7	6	A	Regal.....	39	39	83	2.8	2.8	44.5	21.5	12.0
..	Trebi.....	56	36	81	1.8	2.2	49.0	36.5	13.4
..	O.A.C. 21.....	39	45	83	2	2.4	45.5	23.0	12.7
..	Peatland.....	36	37	89	3	3	53.5	24.0	15.6
..	Colless.....	36	36	82	1.8	2	38.0	20.5	14.6
Significant Difference 8.6 bus.											
WM. JAS. PERDUE, PEEBLES											
7	6	B	Regal.....	38	35	86	3	3	48.0	24.5	12.8
..	Trebi.....	40	32	86	2.2	2.2	46.0	34.5	13.2
..	O.A.C. 21.....	29	36	86	2.2	2.2	47.5	28.5	13.4
..	Peatland.....	20	32	88	3	2	51.5	26.8	10.5
..	Colless.....	36	33	86	2.8	2.8	42.5	27.8	13.6
Significant Difference 7.9 bus.											
GORDON V. R. STRINGER, GRENFELL											
7	7	B	Regal.....	39	35	92	2	1.4	49.5	27.5	11.5
..	Trebi.....	51	26	89	1.8	1.6	52.0	46.0	11.9
..	O.A.C. 21.....	39	40	91	2.2	1.8	50.0	34.5	12.0
..	Peatland.....	33	35	92	3	3	53.0	25.8	14.9
..	Colless.....	29	31	89	1.2	2.4	46.0	29.3	13.3
Significant Difference 5.6 bus.											
G. A. DUNBAR, NORTH PORTAL											
1	4	Key	Regal.....	12	25	67	3	2.4	40.6	19.6	9.5
..	Trebi.....	28	21	67	3	2.4	49.5	36.0	10.8
..	O.A.C. 21.....	13	29	69	2.8	2.6	44.5	21.8	10.2
..	Peatland.....	23	25	82	3	3	52.0	25.0	13.0
..	Colless.....	14	23	66	3	2.8	38.5	21.8	12.6
Significant Difference 2.9 bus.											
FRED G. BURNS, HEWARD											
1	9	Key	Regal.....	37	29	78	3	2.4	45.0	24.3	12.3
..	Trebi.....	46	27	77	2.2	2	49.5	40.0	13.3
..	O.A.C. 21.....	36	31	74	2.6	2	46.0	23.8	12.4
..	Peatland.....	24	25	83	3	1	54.0	27.0	16.5
..	Colless.....	37	27	69	3	3	45.5	26.0	14.1
Significant Difference 3.6 bus.											

Table No. 1 (Continued)—Cereal Variety Zone 2A

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
J. C. MITCHELL, DAHINDA											
2	9	Key	Regal.....	43	40	91	1.8	2.2	52.0	28.3	12.2
..	Trebi.....	64	34	91	1.2	2	52.5	45.5	12.8
..	O.A.C. 21.....	49	42	90	2	1.6	52.5	30.3	13.2
..	Hannchen.....	52	35	92	1.6	2.4	52.0	34.8	13.2
..	Colsess.....	51	35	91	1.6	3	48.0	33.8	13.5

Significant Difference 6.4 bus.

MIKE GANSHORN, GRAND-COULEE											
6	7	Key	Regal.....	37	38	87	3	2.6	50.0	32.5	11.2
..	..	..	Trebi.....	63	34	86	2.2	2.6	52.5	46.3	12.5
..	..	..	O.A.C. 21.....	39	41	91	2	2.6	51.0	27.8	12.1
..	..	..	Hannchen.....	35	35	94	2.4	2.8	51.0	30.0	11.7
..	..	..	Colsess.....	41	36	86	3	3	47.0	31.5	12.9

Significant Difference 8.5 bus.

HAROLD MORRELL, BOX 435, QU'APPELLE											
6	8	Key	Regal.....	59	40	84	3	2.2	51.0	29.8	11.5
..	..	..	Trebi.....	65	35	84	2	1.6	49.5	40.5	11.6
..	..	..	O.A.C. 21.....	46	42	84	1	1.8	50.5	28.5	11.8
..	..	..	Hannchen.....	46	38	87	3	1.8	53.0	31.5	12.7
..	..	..	Colsess.....	56	36	80	3	2.4	47.5	30.8	12.4

Significant Difference 11.2 bus.

W. H. OLIVE, WOLSELEY											
7	7	Key	Regal.....	33	30	78	2	..	47.5	25.0	12.9
..	..	..	Trebi.....	41	36	80	2	..	50.5	40.5	13.9
..	..	..	O.A.C. 21.....	41	32	80	1	..	49.0	27.0	13.2
..	..	..	Peatland.....	33	30	84	2.2	..	53.5	26.0	16.4
..	..	..	Colsess.....	24	34	76	3	..	45.5	30.5	15.3

Significant Difference 17.7 bus.

Tests Discarded on Account of Damage by Pests, Hail, or Other Causes

1	4	B	Metro Katrusak, Bienfait	6	2	A	Cliff W. Kennedy, Krona
1	5	A	Roger Carlton, Benson	6	6	B	W. F. Botkin, Rouleau
1	5	B	Paul Gervais, Hitchcock	2	1	Key	J. H. Stockton, Radville
6	1	A	Edward Roy Vanstone, Lang				

Note.—The figures and letters before each name represent, in order, the District, Sub-District, and Test Designation.

CEREAL VARIETY ZONE 2B

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
JOHN DOUGLAS BECK, MAWER											
5	8	A	Regal.....	9	27	82	3	2.8	53.0	35.0	15.4
..	Trebi.....	17	26	80	2.2	3	49.0	42.0	14.9
..	O.A.C. 21.....	15	29	82	2.6	1.4	51.0	33.8	14.6
..	Hannchen.....	16	26	87	3	3	53.5	39.0	15.9
..	Colsess.....	19	26	79	2.8	3	46.0	34.3	15.7

Significant Difference 2.2 bus.

DARL EDWIN HICKS, MARQUIS											
5	8	B	Regal.....	39	38	84	2.8	2	48.0	27.8	11.4
..	..	..	Trebi.....	68	29	82	1.6	2.8	49.5	42.0	11.6
..	..	..	O.A.C. 21.....	43	42	84	2	1.2	48.5	28.8	11.8
..	..	..	Hannchen.....	51	35	85	1.4	2.4	52.5	29.0	12.2
..	..	..	Colsess.....	40	33	82	2.4	3	45.5	31.0	12.7

Significant Difference 5.7 bus.

LAWRENCE HICKEY, BETHUNE											
6	10	B	Regal.....	53	44	88	2.4	2.4	55.0	34.0	12.4
..	..	..	Trebi.....	62	37	87	2	2	52.5	46.0	11.4
..	..	..	O.A.C. 21.....	48	49	87	2	1.8	54.0	36.5	12.9
..	..	..	Hannchen.....	56	43	91	1.6	1.6	55.5	35.0	11.8
..	..	..	Colsess.....	47	38	86	1.8	1.8	49.0	33.0	13.0

Significant Difference 11.9 bus.

GEORGE STAN, DYSART											
9	2	A	Regal.....	40	36	92	2	2	48.0	31.8	12.3
..	..	..	Trebi.....	52	43	92	1.5	1.5	48.5	40.5	13.4
..	..	..	O.A.C. 21.....	35	42	92	2	2.3	49.5	30.8	14.2
..	..	..	Peatland.....	30	..	92	..	..	53.0	31.3	16.8
..	..	..	Colsess.....	40	37	92	1.4	2.3	44.0	27.5	13.4

Significant Difference 8.0 bus.

Table No. 1 (Continued)—Cereal Variety Zone 2B

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in percentage
JOE PALMER, SOUTHEY											
9	2	B	Regal.....	51	40	90	3	3	49.0	26.0	13.8
..	Trebi.....	49	37	88	2	2	49.5	35.8	13.6
..	O.A.C. 21.....	40	40	88	1	1	49.0	29.8	13.4
..	Peatland.....	29	38	87	2	2	52.5	25.8	15.9
..	Colsess.....	43	37	87	2	3	30.0	46.0	14.5
Significant Difference 9.0 bus.											
ALBERT EDWARD RUMBALL, SOUTHEY											
9	3	A	Regal.....	52	32	92	3	2.6	32.0	32.5	12.3
..	Trebi.....	52	27	91	2.6	1.2	50.5	43.3	12.1
..	O.A.C. 21.....	46	36	94	2	1.2	51.5	32.3	12.7
..	Peatland.....	46	31	96	3	3	54.0	29.5	16.2
..	Colsess.....	37	29	88	1.2	2.8	45.0	30.8	14.0
Significant Difference 9.8 bus.											
MISS HERTA EMMA MATHILDA DOEGE, SILTON											
9	4	A	Regal.....	58	48	83	..	..	48.0	31.8	13.0
..	Trebi.....	72	48	84	..	..	50.0	46.8	13.6
..	O.A.C. 21.....	64	50	83	..	..	50.5	30.8	12.8
..	Peatland.....	43	48	84	..	..	53.0	29.3	15.0
..	Colsess.....	60	48	82	..	..	46.0	33.3	14.8
Significant Difference 6.1 bus.											
HOWARD JAMES MORTON, GIBBS											
9	4	B	Regal.....	56	42	90	2.6	2	52.0	35.0	11.6
..	Trebi.....	65	47	90	2.6	2	52.0	44.5	11.0
..	O.A.C. 21.....	61	51	90	1.3	1	54.0	32.3	12.2
..	Peatland.....	43	51	90	3	2	53.5	27.5	14.3
..	Colsess.....	53	48	89	2.6	2.6	48.0	33.3	12.5
Significant Difference 11.5 bus.											
EDWIN BRUCE MARTIN, GOVAN											
9	5	B	Regal.....	24	39	..	2.4	2	52.0	30.8	12.3
..	Trebi.....	58	34	82	1.8	2	49.5	38.5	12.2
..	O.A.C. 21.....	27	40	84	1.8	2	53.5	34.3	12.8
..	Peatland.....	24	37	82	3	1.6	53.5	27.8	15.7
..	Colsess.....	31	29	81	2.4	2.8	46.0	32.3	12.4
Significant Difference 17.0 bus.											
HAROLD SORTEBERG, GOVAN											
9	6	A	Regal.....	34	37	80	2.2	1.6	46.0	29.0	12.4
..	Trebi.....	45	37	79	1.2	1.4	46.0	35.0	12.9
..	O.A.C. 21.....	24	38	79	1.8	1.6	46.0	25.5	12.7
..	Peatland.....	25	39	82	1.6	2.4	52.0	31.0	15.9
..	Colsess.....	37	36	75	2.2	3	43.5	26.0	14.1
Significant Difference 5.8 bus.											
EARL MELVIN SCHMIDT, DRAKE											
9	6	B	Regal.....	49	45	79	3	3	52.5	29.5	14.3
..	Trebi.....	58	39	77	1.2	2	53.0	43.3	14.4
..	O.A.C. 21.....	39	47	80	1	1	51.0	30.5	14.0
..	Peatland.....	28	43	77	2	1	52.0	29.3	16.8
..	Colsess.....	50	41	75	3	3	50.0	34.0	15.1
Significant Difference 13.2 bus.											
CARL FREDERICH LOWENBERGER, RAYMORE											
9	7	A	Regal.....	68	....	....	..	..	52.0	35.0	11.6
..	Trebi.....	61	....	....	..	..	51.0	45.5	11.8
..	O.A.C. 21.....	47	....	....	..	..	51.5	36.3	12.8
..	Peatland.....	38	....	....	..	..	54.0	29.5	15.2
..	Colsess.....	38	....	....	..	..	48.5	36.3	13.0
Significant Difference 9.0 bus.											
MILES SAUL, SEMANS											
9	7	B	Regal.....	32	35	89	3	1.8	46.5	25.3	10.8
..	Trebi.....	39	32	89	2	2.2	47.0	36.8	11.5
..	O.A.C. 21.....	29	39	90	2.2	1.2	47.5	31.8	11.7
..	Peatland.....	29	36	93	3	3	53.0	26.8	15.1
..	Colsess.....	22	31	89	2	2.6	40.0	25.0	13.1
Significant Difference 6.3 bus.											
LEONARD GEO. BOLT, DAFOE											
9	8	B	Regal.....	45	34	86	3	2.4	50.0	30.3	12.2
..	Trebi.....	40	27	84	3	2	45.5	32.5	13.4
..	O.A.C. 21.....	28	37	85	3	1.6	49.5	28.3	13.2
..	Peatland.....	23	30	86	3	2	53.0	27.0	15.3
..	Colsess.....	34	30	83	3	2.8	41.5	29.3	14.4
Significant Difference 12.7 bus.											

Table No. 1 (Continued)—Cereal Variety Zone 2B

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
WM. RICHARD ORVILLE DODDS, CRAIK											
10	1	A	Regal.....	14	37	90	2.8	3	52.0	32.8	13.1
"	"	"	Trebi.....	16	32	87	2.8	2.6	48.0	35.0	14.5
"	"	"	O.A.C. 21.....	16	41	88	2	1.3	48.0	31.0	13.2
"	"	"	Hannchen.....	15	34	94	1.4	"	52.5	30.0	13.8
"	"	"	Colsess.....	20	36	87	2.4	3	49.0	30.5	14.6
Samples Incomplete.											
CLAYTON EDGERSON McWILLIAMS, HOLDFAST											
10	1	B	Regal.....	53	40	....	2.8	3	53.0	31.5	11.8
"	"	"	Trebi.....	75	36	....	2.6	2.4	52.0	42.8	12.1
"	"	"	O.A.C. 21.....	59	48	....	2	1	54.0	33.5	12.7
"	"	"	Hannchen.....	58	36	....	2.8	2.8	54.5	32.5	12.7
"	"	"	Colsess.....	50	38	....	3	3	47.0	31.5	13.2
Significant Difference 9.6 bus.											
LESLIE DAVID WILKINSON COOPER, TUGASKE											
10	2	A	Regal.....	17	25	85	3	2	49.0	28.0	14.9
"	"	"	Trebi.....	21	25	76	2.6	2.6	44.0	31.0	15.1
"	"	"	O.A.C. 21.....	18	28	87	2.4	1.2	45.5	22.5	14.3
"	"	"	Hannchen.....	22	23	84	3	"	52.0	33.0	16.2
"	"	"	Colsess.....	22	27	84	3	3	42.0	29.0	14.9
Significant Difference 5.0 bus.											
RICHARD SAMUEL JACKSON, RIVERHURST											
10	2	B	Regal.....	38	30	91	3	3	56.0	32.5	14.4
"	"	"	Trebi.....	58	28	82	2.6	2.6	52.0	40.5	13.5
"	"	"	O.A.C. 21.....	34	31	86	2.4	1	53.5	29.5	14.1
"	"	"	Hannchen.....	49	25	91	2.2	1.8	55.0	43.3	15.3
"	"	"	Colsess.....	45	30	85	2.6	2.8	50.0	33.0	14.2
Significant Difference 12.6 bus.											
HARLON T. EWING, WISETON											
10	4	A	Regal.....	30	33	95	2	2	55.0	36.3	13.5
"	"	"	Trebi.....	42	27	90	3	2	50.5	43.8	13.4
"	"	"	O.A.C. 21.....	31	36	90	1	2	53.0	33.0	13.3
"	"	"	Hannchen.....	42	28	95	2	3	56.0	36.8	14.2
"	"	"	Colsess.....	33	28	92	3	3	48.5	34.5	14.1
Significant Difference 9.3 bus.											
ROY CLILL GATES, MILDEN											
10	4	B	Regal.....	60	31	....	3	3	52.5	32.3	11.8
"	"	"	Trebi.....	61	25	....	2.8	3	55.0	48.8	11.7
"	"	"	O.A.C. 21.....	42	29	....	1.8	1.8	53.0	32.3	13.0
"	"	"	Hannchen.....	57	26	....	3	3	57.0	35.0	11.2
"	"	"	Colsess.....	41	27	....	2.7	3	50.0	31.0	13.3
Significant Difference 7.7 bus.											
STEWART KENNEDY, CONQUEST											
10	5	B	Regal.....	51	29	77	3	2.4	52.5	34.0	13.5
"	"	"	Trebi.....	60	26	74	2	2.4	49.5	43.5	13.6
"	"	"	O.A.C. 21.....	43	31	76	1	1	50.5	30.0	13.3
"	"	"	Hannchen.....	51	25	83	2	3	55.0	38.3	15.2
"	"	"	Colsess.....	49	28	72	3	3	47.0	33.3	14.5
Significant Difference 4.8 bus.											
NORMAN ARNOLD TASTAD, LOREBURN											
10	6	A	Regal.....	14	24	91	3	2.8	51.5	32.5	17.0
"	"	"	Trebi.....	27	25	77	2.6	2.4	46.0	31.8	16.2
"	"	"	O.A.C. 21.....	12	24	77	2	1	50.0	27.8	15.7
"	"	"	Hannchen.....	13	23	91	3	2.6	53.0	35.5	18.1
"	"	"	Colsess.....	21	25	86	3	3	45.5	30.3	16.5
Significant Difference 4.0 bus.											
BURTON OLIVER BERG, OUTLOOK											
10	6	B	Regal.....	26	29	90	3	3	52.5	31.3	11.3
"	"	"	Trebi.....	45	24	86	2.6	2.6	50.5	42.8	12.1
"	"	"	O.A.C. 21.....	23	32	91	2.8	2.6	52.5	34.0	12.6
"	"	"	Hannchen.....	35	25	96	3	2.8	52.5	33.8	12.0
"	"	"	Colsess.....	16	25	86	2.4	3	46.0	30.5	13.5
Significant Difference 6.9 bus.											
OSCAR WILLNER, DAVIDSON											
10	7	A	Regal.....	21	28	91	2.6	2.6	53.5	32.5	14.3
"	"	"	Trebi.....	32	24	82	2.6	2.2	49.5	38.0	14.1
"	"	"	O.A.C. 21.....	16	30	91	3	2	51.0	33.3	14.1
"	"	"	Hannchen.....	25	25	91	2.8	2	56.0	36.3	15.0
"	"	"	Colsess.....	22	24	89	3	3	48.0	30.8	15.0
Significant Difference 3.0 bus.											

Table No. 1 (Continued)—Cereal Variety Zone 2B

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
MISS EUPHEMIA McARTHUR, WATROUS											
10	8	A	Regal.....	31	32	94	3.0	2.0	51.5	33.3	11.8
..	Trebl.....	34	36	93	1	1	51.5	44.3	12.7
..	O.A.C. 21.....	34	29	95	3	1	52.0	36.3	12.6
..	Hannchen.....	39	27	96	2	3	55.0	42.0	13.4
..	Colsess.....	32	26	92	2	2	48.5	33.3	11.7
Significant Difference 11.6 bus.											
RAYMOND WM. BUSCHE, IMPERIAL											
10	8	B	Regal.....	50	35	82	2.6	2.0	49.0	29.3	13.0
..	Trebl.....	40	29	81	2.2	1.4	48.0	36.3	13.5
..	O.A.C. 21.....	36	39	81	1.8	1.4	49.0	26.0	12.8
..	Hannchen.....	49	32	83	1.6	1.6	54.0	36.3	13.9
..	Colsess.....	41	33	80	1.8	2.6	45.0	29.5	14.1
Significant Difference 4.6 bus.											
ELMER HERBERT CATTON, HANLEY											
10	9	A	Regal.....	13	29	80	2.4	2.4	51.5	35.0	14.6
..	Trebl.....	29	24	78	2	2.6	45.5	36.5	14.5
..	O.A.C. 21.....	8	28	78	1.6	1.4	49.5	29.8	14.6
..	Hannchen.....	13	24	79	1.4	1.8	53.0	37.5	15.3
..	Colsess.....	29	24	78	3	3	48.5	29.5	14.1
Significant Difference 3.4 bus.											
LLOYD KELLER STROUTS, HANLEY											
10	9	B	Regal.....	18	21	81	3.0	2.0	50.5	34.8	14.9
..	Trebl.....	20	21	76	2.4	1.4	46.5	37.3	14.5
..	O.A.C. 21.....	16	20	79	2.6	1	48.0	30.0	16.0
..	Hannchen.....	16	19	83	3	2	53.0	34.5	15.1
..	Colsess.....	18	22	76	3	3	43.5	30.5	15.7
Significant Difference 3.7 bus.											
LLOYD GEO. SCHUMACHER, DONAVON											
10	10	A	Regal.....	29	35	....	2.0	3.0	52.5	33.5	13.2
..	Trebl.....	70	29	....	1	2	52.0	48.0	12.4
..	O.A.C. 21.....	19	37	....	1.2	1	52.5	31.0	13.6
..	Hannchen.....	45	31	....	1.8	3	48.0	37.8	13.7
..	Colsess.....	51	31	....	1.6	2.8	48.0	35.5	13.4
Significant Difference 13.8 bus.											
DALTON MILLAR HUSBAND, HARRIS											
10	10	B	Regal.....	38	....	....	2.6	2.6	54.0	36.3	14.4
..	Trebl.....	26	....	....	2.3	2.4	48.5	38.8	14.3
..	O.A.C. 21.....	21	....	....	2	1.4	52.0	33.0	13.4
..	Hannchen.....	41	....	....	2.2	2	55.0	36.8	15.7
..	Colsess.....	40	....	....	3	3	47.6	33.5	15.0
Samples Incomplete.											
EARL ALBERT HARBICHT, HUGHTON											
11	2	A	Regal.....	82	34	....	2.6	2.8	56.0	36.5	13.5
..	Trebl.....	78	32	....	2.2	2.6	53.0	46.0	13.5
..	O.A.C. 21.....	74	35	....	2.2	2	54.5	36.3	12.6
..	Hannchen.....	77	29	....	2.6	3	54.5	36.5	14.3
..	Colsess.....	73	31	....	3	3	51.0	35.0	14.3
Significant Difference 9.2 bus.											
ROBERT ANDERSON, BIGGAR											
11	7	A	Regal.....	41	35	83	2.8	2.6	53.5	31.5	13.6
..	Trebl.....	49	35	83	2.6	2.6	48.0	32.0	14.6
..	O.A.C. 21.....	38	38	82	2	2	50.0	34.0	13.3
..	Hannchen.....	35	37	84	2.2	2	52.0	36.5	15.5
..	Colsess.....	45	36	83	2.8	2.8	48.5	31.0	14.2
Significant Difference 16.1 bus.											
WILLIAM S. POWELL, ROSETOWN											
11	7	B	Regal.....	46	38	....	2.4	2.4	53.5	27.5	13.6
..	Trebl.....	56	35	....	2.4	2.2	48.0	34.0	14.3
..	O.A.C. 21.....	39	42	....	2.2	2.8	50.5	27.3	14.0
..	Hannchen.....	43	32	....	2.2	2.2	55.0	24.6	15.2
..	Colsess.....	50	37	....	3	2.4	47.0	30.3	15.0
Significant Difference 6.1 bus.											
GEORGE WILSON, HERSCHEL											
11	8	B	Regal.....	30	36	84	2.4	1.4	53.0	30.0	14.2
..	Trebl.....	28	35	78	2.4	2.8	47.0	33.0	13.6
..	O.A.C. 21.....	14	37	83	1.4	1	48.0	25.0	14.5
..	Hannchen.....	33	31	84	2.8	2	55.0	31.5	16.3
..	Colsess.....	27	35	81	1.4	2.8	44.0	30.5	15.7
Significant Difference 6.4 bus.											

Table No. 1 (Continued)—Cereal Variety Zone 2B

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
HUGH ALBERT RIDDELL, SPRINGWATER											
12	1	A	Regal.....	18	24	109	3.0	2.8	54.0	33.0	13.8
"	"	"	Trebi.....	37	24	83	1	3	51.5	44.3	12.8
"	"	"	O.A.C. 21.....	16	22	109	3	1	52.0	30.5	13.5
"	"	"	Hannchen.....	34	24	91	3	1	56.5	41.5	13.6
"	"	"	Colless.....	29	22	91	3	3	49.5	35.0	14.1
Significant Difference 7.0 bus.											
LLOYD QUENTIN LINDGREN, BIGGAR											
12	1	B	Regal.....	39	28	100	3	2.8	49.5	33.5	13.9
"	"	"	Trebi.....	49	26	87	2.8	2	49.5	41.5	12.9
"	"	"	O.A.C. 21.....	29	31	94	2.2	2	50.5	31.8	13.1
"	"	"	Hannchen.....	53	25	94	3	2	55.0	41.8	14.9
"	"	"	Colless.....	38	27	89	2.8	3	48.0	32.5	13.4
Significant Difference 6.2 bus.											
JAMES PETER SANDERS, SALTER											
12	2	A	Regal.....	39	33	95	3	2.6	52.0	31.5	12.2
"	"	"	Trebi.....	52	27	98	2.8	2	50.5	43.3	10.9
"	"	"	O.A.C. 21.....	34	32	93	2.2	1.4	52.0	30.0	12.3
"	"	"	Hannchen.....	35	28	96	2.6	2	53.0	35.0	12.0
"	"	"	Colless.....	36	29	98	2.6	3	46.0	31.0	13.2
Significant Difference 10.6 bus.											
STANLEY DOUGLAS FREWEN, BALJENNIE											
12	2	B	Regal.....	39	27	87	1.8	1.8	53.0	32.0	12.5
"	"	"	Trebi.....	43	24	86	2.2	2.4	48.0	37.8	12.5
"	"	"	O.A.C. 21.....	34	28	85	2.2	1	50.5	31.5	13.0
"	"	"	Hannchen.....	43	25	86	2.4	1.6	55.0	37.5	13.1
"	"	"	Colless.....	36	26	86	3	3	47.0	35.0	13.2
Significant Difference 4.9 bus.											
ERNEST OTTO HANSEN, LEIPZIG											
12	3	A	Regal.....	41	28	96	3	3	52.0	28.8	13.4
"	"	"	Trebi.....	44	25	98	3	1.8	48.0	39.8	13.7
"	"	"	O.A.C. 21.....	34	30	96	3	1.6	50.0	27.5	13.5
"	"	"	Hannchen.....	47	25	97	3	2.8	52.0	34.8	14.0
"	"	"	Colless.....	33	26	96	3	3	46.0	30.0	14.4
Significant Difference 7.0 bus.											
EARL EVERETT RICHARDS, TAKO											
12	5	A	Regal.....	8	16	....	2.2	2.4	54.0	27.8	15.0
"	"	"	Trebi.....	14	15	....	1.8	2.2	50.0	40.5	13.8
"	"	"	O.A.C. 21.....	5	14	....	2.2	2	54.0	29.0	14.5
"	"	"	Hannchen.....	8	15	....	2.6	3	52.0	31.5	14.1
"	"	"	Colless.....	7	14	....	2.2	2.2	49.0	30.5	16.1
Significant Difference 3.6 bus.											
CLARENCE EARL PEARSON, REWARD											
12	5	B	Regal.....	26	17	93	2.2	2.2	54.5	35.3	14.1
"	"	"	Trebi.....	33	16	92	2.4	2.6	51.0	40.0	13.5
"	"	"	O.A.C. 21.....	19	17	93	2.6	2.2	54.0	37.3	14.1
"	"	"	Hannchen.....	31	16	93	2.2	2.2	56.0	38.2	13.3
"	"	"	Colless.....	23	15	93	2.2	2.2	48.0	32.0	14.4
Significant Difference 8.5 bus.											
GLENWOOD RICHARD CONNELLY, PRIMATE											
12	6	B	Regal.....	7	24	86	2	2	42.7	23.3	11.2
"	"	"	Trebi.....	16	22	83	1.8	1.3	48.0	35.8	13.1
"	"	"	O.A.C. 21.....	2	24	86	1.7	1.7	....	....	....
"	"	"	Hannchen.....	3	22	86	1.7	2	....	....	....
"	"	"	Colless.....	15	23	81	2.5	2	49.0	29.3	13.6
Severe Grasshopper Damage. Samples Incomplete.											
HARVEY WM. HAMMELL, SENLAC											
12	7	B	Regal.....	21	....	....	"	"	49.0	35.0	17.0
"	"	"	Trebi.....	26	....	....	"	"	45.0	42.8	14.1
"	"	"	O.A.C. 21.....	13	....	....	"	"	51.0	36.3	14.8
"	"	"	Hannchen.....	32	....	....	"	"	55.5	45.5	14.2
"	"	"	Colless.....	20	....	....	"	"	46.0	37.0	15.4
Significant Difference 7.1 bus.											
WM. GRAY GIBB, VISCOUNT											
13	1	A	Regal.....	37	36	....	2.0	2	47.5	27.5	13.0
"	"	"	Trebi.....	48	35	....	1.0	2	45.0	34.8	13.6
"	"	"	O.A.C. 21.....	19	44	....	2.3	1	45.5	26.0	13.3
"	"	"	Peatland.....	18	40	....	2.8	2	51.0	27.0	15.8
"	"	"	Colless.....	49	37	....	3	2.8	46.0	33.3	13.8
Significant Difference 8.3 bus.											

Table No. 1 (Continued)—Cereal Variety Zone 2B

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
THOMAS NOEL CRANE, GUERNSEY											
13	1	B	Regal.....	34	36	....	3	3	51.0	36.3	11.8
..	Trebi.....	37	31	....	3	3	43.4	44.0	11.0
..	O.A.C. 21.....	37	40	....	3	3	48.5	30.5	12.3
..	Peatland.....	26	35	....	3	1	49.5	26.8	12.9
..	Colless.....	12	33	....	3	3	47.5	33.5	14.4
Significant Difference 9.0 bus.											
HERBERT LESLIE GJOSUND, MEACHAM											
13	2	A	Regal.....	51	37	100	2.8	2.8	49.5	27.8	12.5
..	Trebi.....	50	30	91	1	1	51.5	38.8	13.7
..	O.A.C. 21.....	36	38	100	2.2	2	49.5	28.0	13.1
..	Peatland.....	29	31	98	1.8	2	52.0	24.3	15.3
..	Colless.....	51	33	91	2	2	48.5	33.3	13.7
Significant Difference 6.7 bus.											
HARRY JAMES RICHMOND, YOUNG											
13	2	B	Regal.....	28	26	....	2.4	2.2	50.0	28.0	12.2
..	Trebi.....	28	27	....	2	2.2	47.5	39.0	13.4
..	O.A.C. 21.....	24	27	....	2.2	2.2	48.0	27.5	12.5
..	Peatland.....	12	23	....	1.6	1.4	52.5	27.5	15.0
..	Colless.....	29	27	....	2.4	2.4	45.5	32.2	13.1
Samples Incomplete.											
WM. GEO. BITZ, ALLAN											
13	3	A	Regal.....	29	20	97	..	..	51.0	36.5	12.1
..	Trebi.....	48	19	97	..	..	51.0	53.3	11.9
..	O.A.C. 21.....	27	23	97	..	..	50.0	37.0	12.9
..	Peatland.....	29	18	98	..	..	48.5	29.3	13.8
..	Colless.....	31	22	96	..	..	47.0	33.8	13.5
Significant Difference 9.8 bus.											
CHARLES HORTON HOKANSON, DUNDURN											
13	3	B	Regal.....	25	24	84	2.2	2.2	48.5	26.8	14.5
..	Trebi.....	30	28	84	2.4	2.8	44.5	35.3	14.8
..	O.A.C. 21.....	10	25	83	2.2	1.2	45.5	24.8	14.2
..	Peatland.....	13	21	85	3	1.8	50.5	27.0	16.9
..	Colless.....	31	25	84	2.6	3	48.0	30.5	14.3
Significant Difference 8.1 bus.											
RALPH DUNSTER, BLUCHER											
13	4	A	Regal.....	29	27	83	3	3	50.0	27.5	15.0
..	Trebi.....	35	27	78	3	3	48.5	36.3	15.8
..	O.A.C. 21.....	23	30	81	3	1.2	45.5	22.8	14.6
..	Peatland.....	12	23	86	3	1	50.0	23.9	18.4
..	Colless.....	30	29	77	2.8	3	44.0	29.0	13.8
Significant Difference 3.0 bus.											
WILBER ALVIN POLLOCK, SASKATOON											
13	4	B	Regal.....	31	35	....	..	..	49.0	28.3	14.7
..	Trebi.....	39	31	....	..	..	46.0	35.0	15.0
..	O.A.C. 21.....	13	36	....	..	..	47.0	26.3	15.1
..	Peatland.....	15	32	....	..	..	50.0	24.3	18.4
..	Colless.....	33	34	....	..	..	44.5	29.3	15.8
Significant Difference 4.6 bus.											
FRED L. WALDNER, LANGHAM											
13	5	A	Regal.....	32	32	....	3	3	51.0	31.8	15.0
..	Trebi.....	31	32	....	3	3	48.5	36.3	13.9
..	O.A.C. 21.....	22	33	....	1	1	48.5	27.8	14.8
..	Peatland.....	17	31	....	2	2	50.5	26.0	16.5
..	Colless.....	31	27	....	3	3	47.0	31.0	15.1
Significant Difference 3.9 bus.											
JOHN HARVEY GWYNNE SMITH, DELISLE											
13	5	B	Regal.....	57	38	95	3	2.8	52.5	36.8	12.1
..	Trebi.....	69	28	93	2.8	2.2	52.5	46.3	12.3
..	O.A.C. 21.....	47	42	93	2	1.2	54.5	36.3	12.7
..	Peatland.....	43	34	94	3	2.8	55.0	30.0	15.3
..	Colless.....	51	32	88	3	3	49.0	35.0	13.3
Significant Difference 11.7 bus.											
VICTOR OZSCAR BIEMER, PERDUE											
13	6	A	Regal.....	33	30	91	3	3	52.0	33.8	14.5
..	Trebi.....	35	28	85	2	2	48.5	40.0	14.9
..	O.A.C. 21.....	24	33	87	2	1	50.5	27.3	13.9
..	Peatland.....	17	24	90	2	1	53.0	28.5	17.1
..	Colless.....	35	28	84	3	3	46.5	33.5	14.8
Significant Difference 4.3 bus.											

Table No. 1 (Continued)—Cereal Variety Zone 2B

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
EVANS GORDON ELLIOTT, SONNINGDALE											
13	6	B	Regal.....	56	....	....	3	3	51.0	34.0	14.4
"	"	"	Trebi.....	68	....	82	3	2.4	51.5	45.5	14.7
"	"	"	O.A.C. 21.....	52	....	82	3	1.8	52.5	34.5	14.2
"	"	"	Peatland.....	31	....	....	2.8	1	53.5	29.5	17.4
"	"	"	Colless.....	59	....	82	3	3	46.5	34.0	14.8
Significant Difference 11.5 bus.											
JOHN KENNETH CONN, ABERDEEN											
13	7	A	Regal.....	32	39	91	2.8	3	53.5	34.3	12.5
"	"	"	Trebi.....	61	31	86	1.2	3	51.0	40.0	11.8
"	"	"	O.A.C. 21.....	37	41	86	1.8	2	53.0	34.0	12.7
"	"	"	Peatland.....	18	33	86	3	1.6	53.0	27.8	15.1
"	"	"	Colless.....	46	34	83	2.8	3	49.5	37.3	13.2
Significant Difference 5.0 bus.											
NORMAN GARFIELD HUFFMAN, ABERDEEN											
13	7	B	Regal.....	44	33	....	3	2.6	50.0	31.0	13.0
"	"	"	Trebi.....	47	28	....	2.4	2.6	49.5	39.8	13.6
"	"	"	O.A.C. 21.....	33	37	....	2.4	2.8	51.0	34.5	13.5
"	"	"	Peatland.....	26	31	....	2.8	2.2	52.0	26.5	15.3
"	"	"	Colless.....	36	34	....	3	3	47.0	32.0	13.9
Significant Difference 6.1 bus.											
LEONARD SMITH, PRUD'HOMME											
13	8	A	Regal.....	15	....	....	"	"	50.0	30.0	15.6
"	"	"	Trebi.....	21	....	....	"	"	42.0	29.8	16.1
"	"	"	O.A.C. 21.....	12	....	....	"	"	51.5	33.3	14.8
"	"	"	Peatland.....	6	....	....	"	"	54.5	32.8	18.9
"	"	"	Colless.....	15	....	....	"	"	44.0	30.3	16.7
Significant Difference 5.0 bus.											
JOHN ROLES, BRUNO											
13	8	B	Regal.....	40	32	85	3	3	50.5	33.3	13.6
"	"	"	Trebi.....	32	27	83	1	2.2	45.0	34.0	14.6
"	"	"	O.A.C. 21.....	28	32	84	1.4	1.6	48.0	27.8	13.5
"	"	"	Peatland.....	21	26	87	1.2	1	52.5	26.8	16.0
"	"	"	Colless.....	45	30	77	2.4	3	41.0	28.3	14.2
Significant Difference 6.1 bus.											
JOHN McGHIE, ROWLETTA											
5	8	Key	Regal.....	29	34	80	2.6	1.6	52.5	30.0	13.3
"	"	"	Trebi.....	46	33	80	1.8	2.4	48.5	40.0	13.4
"	"	"	O.A.C. 21.....	28	37	80	2.2	1	50.0	30.0	13.4
"	"	"	Hannchen.....	47	30	87	1.8	2.4	55.0	37.3	14.8
"	"	"	Colless.....	42	34	80	2.6	3	47.5	31.5	14.5
Significant Difference 9.8 bus.											
G. W. HANMER, GOVAN											
9	5	Key	Regal.....	48	40	....	3	"	54.0	35.5	10.8
"	"	"	Trebi.....	69	36	....	2.2	"	53.0	45.3	10.8
"	"	"	O.A.C. 21.....	50	42	....	2.8	"	52.5	36.5	11.9
"	"	"	Peatland.....	36	39	....	3	"	52.0	26.5	14.2
"	"	"	Colless.....	46	36	....	3	"	47.5	32.8	12.7
Significant Difference 3.5 bus.											
C. N. LINTOTT, RAYMORE											
9	7	Key	Regal.....	69	46	....	2.2	"	54.0	31.8	13.6
"	"	"	Trebi.....	67	39	....	2	"	54.5	45.5	12.4
"	"	"	O.A.C. 21.....	70	47	....	2	"	54.5	36.3	13.3
"	"	"	Peatland.....	55	45	....	3	"	56.0	28.8	16.5
"	"	"	Colless.....	64	39	....	2.8	"	50.0	38.8	13.7
Significant Difference 8.8 bus.											
PETER KENNEDY, CONQUEST											
10	5	Key	Regal.....	48	30	77	3	2.4	54.0	33.0	14.4
"	"	"	Trebi.....	54	27	74	2	2.4	50.5	41.3	14.2
"	"	"	O.A.C. 21.....	39	32.4	76	1	1	51.0	28.5	13.8
"	"	"	Hannchen.....	50	25	83	2	3	55.5	38.8	15.3
"	"	"	Colless.....	46	31	72	3	3	48.5	34.0	15.3
Significant Difference 3.4 bus.											
ROBERT WILSON, TUGASKE											
10	2	Key	Regal.....	35	38	....	2.8	1	48.0	23.8	14.5
"	"	"	Trebi.....	46	35	....	2.6	2.2	47.0	35.5	15.5
"	"	"	O.A.C. 21.....	23	41	....	2.8	1	47.0	21.3	14.7
"	"	"	Hannchen.....	28	35	....	2.8	1.8	50.5	26.0	16.4
"	"	"	Colless.....	33	37	....	1.8	3	43.5	30.0	15.9
Significant Difference 17.7 bus.											

Table No. 1 (Continued)—Cereal Variety Zone 2B

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
FARQUHARSON BROS., ZEALANDIA											
11	7	Key	Regal.....	44	39	82	3	3	51.0	31.3	13.7
..	Trebi.....	44	33	79	3	2	49.5	38.8	14.9
..	O.A.C. 21.....	28	42	80	2	1	49.5	27.5	14.4
..	Hannchen.....	43	33	83	3	3	53.0	29.0	15.3
..	Colsess.....	40	35	77	3	3	47.0	29.5	15.6
Significant Difference 6.5 bus.											

G. R. HART, LANDIS											
12	3	Key	Regal.....	33	28	....	2.8	2.8	52.0	29.8	14.6
..	..	..	Trebi.....	40	27	....	3	2	49.0	34.5	15.3
..	..	..	O.A.C. 21.....	23	31	....	1.6	1.2	50.5	24.3	14.7
..	..	..	Peatland.....	39	26	....	3	2	55.0	31.0	15.7
..	..	..	Colsess.....	27	27	....	3	2.6	45.0	28.8	15.3
Significant Difference 4.6 bus.											

H. R. FERGUSON, SONNINGDALE											
13	6	Key	Regal.....	45	30	....	3	3	52.5	35.0	14.5
..	..	..	Trebi.....	46	25	....	1	1.4	47.0	38.3	14.9
..	..	..	O.A.C. 21.....	33	29	....	1.8	1.6	51.5	29.5	14.4
..	..	..	Peatland.....	25	25	....	3	1.2	52.0	26.0	17.5
..	..	..	Colsess.....	44	29	....	2.2	3	47.0	31.8	15.3
Significant Difference 3.6 bus.											

Tests Discarded on Account of Damage by Pests, Hail, or Other Causes

9	5	A	Joseph Alexander McKay, Govan	12	3	B	Russell Elridge Bielby, Kelfield
10	5	A	Alfred Arthur Drackley, Birsay	12	4	A	Willmer John Zirk, Luseland
10	7	B	Harold Arthur Storey, Girvin	12	4	B	Glen Frank Schlosser, Kerrobert
11	8	A	Gordon H. Thompson, Herschel	12	6	A	Gus. Honecher, Cactus Lake
11	8	C	Robert Edward Thompson, Herschel				

Note.—The figures and letters before each name represent, in order, the District, Sub-District, and Test Designation.

CEREAL VARIETY ZONE 2C

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
DONALD ALEXANDER MEINERT, INSTOW											
3	8	A	Regal.....	31	31	103	2.8	2.4	54.0	36.3	15.6
..	Trebi.....	46	27	101	2.2	2.4	52.0	47.3	13.9
..	O.A.C. 21.....	26	31	102	2	1	54.0	37.8	14.3
..	Hannchen.....	41	29	100	3	2.6	56.0	40.3	14.4
..	Colsess.....	40	29	98	3	3	50.0	37.5	14.8
Significant Difference 12.1 bus.											

CLARENCE NELSON, INSTOW											
3	8	B	Regal.....	52	36	97	2.2	1.4	54.0	34.8	12.7
..	..	..	Trebi.....	57	28	96	2.6	1.6	51.5	48.5	13.1
..	..	..	O.A.C. 21.....	49	38	96	1.4	1	52.5	32.5	13.4
..	..	..	Hannchen.....	60	33	97	1.8	1	54.0	37.3	12.7
..	..	..	Colsess.....	50	31	91	3	3	49.5	36.8	13.7
Significant Difference 8.7 bus.											

HARVEY THOS. MELLOR, GARDEN HEAD											
4	1	A	Regal.....	31	29	....	2.8	2.4	53.0	34.8	13.8
..	..	..	Trebi.....	39	21	....	3	3	52.0	45.3	14.2
..	..	..	O.A.C. 21.....	25	31	....	2	1	52.0	33.0	14.1
..	..	..	Hannchen.....	48	26	....	3	2.8	52.0	36.0	12.3
..	..	..	Colsess.....	37	24	....	3	3	49.0	34.5	14.8
Significant Difference 7.2 bus.											

LESLIE TUTTLE, BEVERLEY											
4	3	A	Regal.....	22	33	82	2.4	3	52.5	37.0	15.6
..	..	..	Trebi.....	58	24	81	2	3	51.0	49.8	13.7
..	..	..	O.A.C. 21.....	30	33	81	2	2	52.0	37.5	13.5
..	..	..	Hannchen.....	46	28	83	3	3	55.0	40.8	14.6
..	..	..	Colsess.....	31	27	81	3	3	48.0	39.0	15.5
Significant Difference 7.0 bus.											

WM. MITCHELL RUDOLPH, GULL LAKE											
4	4	A	Regal.....	20	29	86	3	3	53.5	37.0	15.5
..	..	..	Trebi.....	38	25	83	3	3	50.5	45.6	13.8
..	..	..	O.A.C. 21.....	18	27	84	2.6	1.8	53.5	35.0	14.6
..	..	..	Hannchen.....	29	25	86	3	3	56.0	40.0	15.3
..	..	..	Colsess.....	25	24	83	3	3	49.0	34.5	15.9
Significant Difference 5.7 bus.											

Table No. 1 (Continued)—Cereal Variety Zone 2C

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
I. W. STUDER, LAC PELLITIER											
5	3	Key	Regal.....	25	26	....	..	..	52.0	36.3	13.8
..	Trebi.....	31	22	....	..	..	50.0	46.5	13.5
..	O.A.C. 21.....	22	25	....	..	..	50.0	33.8	13.5
..	Hannchen.....	39	24	....	..	..	54.0	37.8	14.9
..	Colsess.....	26	22	....	..	..	49.5	37.0	14.2
Significant Difference 2.9 bus.											

NORMAN MOSES ALLEN, NEVILLE											
5	3	B	Regal.....	26	24	....	3	2.4	51.5	34.3	15.4
..	..	..	Trebi.....	31	27	....	3	2.8	50.0	44.5	14.4
..	..	..	O.A.C. 21.....	16	25	....	3	1.4	52.5	31.5	14.8
..	..	..	Hannchen.....	35	23	....	2.4	2.8	54.5	31.8	15.8
..	..	..	Colsess.....	27	26	....	3	2.8	48.0	37.8	16.3
Significant Difference 4.8 bus.											

Tests Discarded on Account of Damage by Hail, Pests, or Other Causes

5 3 A Geo. Andrew Bannerman, Neville.

Note.—The figures and letters preceding name represent, in order, the Di strict, Sub-District, and Test Designation.

CEREAL VARIETY ZONE 3A

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
NORMAN J. RAINNIE, ALIDA											
1	2	A	Regal.....	11	27	82	2	2.4	30.0	13.5	12.3
..	Trebi.....	36	26	83	2	2.6	40.5	25.0	13.4
..	O.A.C. 21.....	17	30	82	2	2	35.0	15.0	14.2
..	Peatland.....	23	24	85	3	2.6	51.0	26.5	16.8
..	Colsess.....	15	26	81	2	1.4	32.0	17.0	13.4
Significant Difference 5.2 bus.											

RUSSEL YATES, STORTHOAKS											
1	2	B	Regal.....	16	37	....	1	1	37.5	20.0	12.8
..	..	..	Trebi.....	27	33	....	2	2	42.5	28.3	14.7
..	..	..	O.A.C. 21.....	19	40	....	1.4	1.2	42.0	23.0	13.9
..	..	..	Peatland.....	29	33	....	3	3	52.5	25.5	15.1
..	..	..	Colsess.....	27	32	....	2	1.2	36.5	21.0	15.4
Significant Difference 4.4 bus.											

WILLIAM GRAHAM DEYELL, ALAMEDA											
1	3	A	Regal.....	16	....	78	1.2	3	36.5	17.5	12.8
..	..	..	Trebi.....	22	....	78	2.8	2.6	40.5	29.8	13.9
..	..	..	O.A.C. 21.....	18	....	78	3	2	40.0	20.5	12.8
..	..	..	Peatland.....	17	....	82	2.6	3	51.5	25.0	15.1
..	..	..	Colsess.....	15	....	74	2.6	2.8	36.0	22.0	14.9
Significant Difference 5.6 bus.											

RAY BARBER, AUBURNTON											
1	3	B	Regal.....	18	42	80	1.6	3	38.0	16.0	14.1
..	..	..	Trebi.....	41	36	80	1.8	2	46.0	35.3	14.5
..	..	..	O.A.C. 21.....	29	48	80	2	2	42.0	19.3	14.2
..	..	..	Peatland.....	28	41	89	2	1	53.0	23.8	15.4
..	..	..	Colsess.....	26	34.2	76	2.6	3	39.0	21.0	15.3
Significant Difference 2.52 bus.											

NEIL CAMERON, ARCOLA											
1	9	A	Regal.....	25	26	91	1.2	1	44.0	24.0	12.9
..	..	..	Trebi.....	35	20	91	1.4	1.8	46.5	31.3	14.6
..	..	..	O.A.C. 21.....	25	26	91	1.2	1.6	45.5	29.8	13.4
..	..	..	Peatland.....	38	28	93	2.6	2.4	53.0	27.5	15.5
..	..	..	Colsess.....	25	24	91	3	3	42.5	22.8	15.4
Significant Difference 5.5 bus.											

LUCIEN GARNIER, FRYS											
1	10	A	Regal.....	18	37	....	1.2	1.4	39.0	19.0	11.7
..	..	..	Trebi.....	30	32	....	2.4	2.4	44.0	30.3	13.2
..	..	..	O.A.C. 21.....	28	36	....	3	2	44.0	22.5	12.4
..	..	..	Peatland.....	22	33	....	3	3	51.0	26.3	14.5
..	..	..	Colsess.....	20	34	....	1.4	1.8	34.5	20.3	14.8
Significant Difference 6.9 bus.											

DANIEL HENRY SPRY, CARLYLE											
1	10	B	Regal.....	21	36	84	2	2	36.5	16.5	13.8
..	..	..	Trebi.....	38	33	84	2	2	43.0	29.0	14.6
..	..	..	O.A.C. 21.....	28	36	84	1	1	42.0	24.3	13.6
..	..	..	Peatland.....	31	37	88	3	3	52.0	27.5	15.6
..	..	..	Colsess.....	23	34	79	2	2	36.0	19.0	16.5
Significant Difference 4.9 bus.											

Table No. 1 (Continued)—Cereal Variety Zone 3A

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
HUGH DUNCAN AYERS, FAIRLIGHT											
7	1	A	Regal.....	32	44	91	2	2	45.0	24.0	13.4
..	Trebi.....	48	36	97	3	3	47.0	34.5	14.0
..	O.A.C. 21.....	41	47	91	2	2	47.5	26.5	15.5
..	Peatland.....	36	38	97	3	2.4	53.0	29.3	15.9
..	Colsess.....	31	39	91	1	2	43.0	27.5	14.4
Significant Difference 3.9 bus.											
IVAN GEORGE BURDEN, MOOSOMIN											
7	2	A	Regal.....	26	38	90	2.8	2.8	40.5	22.3	12.1
..	Trebi.....	22	31	91	2.4	2.8	45.5	25.3	13.4
..	O.A.C. 21.....	33	41	91	3	3	49.0	23.5	13.1
..	Peatland.....	23	34	99	3	3	51.5	30.0	16.3
..	Colsess.....	28	36	90	2	2	45.0	25.0	14.3
Significant Difference 9.0 bus.											
THOMAS PURDEY, MOOSOMIN											
7	2	B	Regal.....	17	31	....	3	2.8	37.0	16.3	11.3
..	Trebi.....	22	26	....	2	2.8	46.0	30.3	13.2
..	O.A.C. 21.....	17	33	....	3	3	39.0	18.5	12.2
..	Peatland.....	19	28	....	3	2.2	52.5	23.3	14.8
..	Colsess.....	20	29	....	2.6	3	38.0	20.5	14.0
Significant Difference 6.0 bus.											
WALDEMAR KIRICHENKO, LANGBANK											
7	3	A	Regal.....	24	48	96	3	3	47.5	24.0	12.1
..	Trebi.....	40	36	94	1	2	50.5	40.8	12.7
..	O.A.C. 21.....	23	46	99	2	2.2	47.0	23.5	13.1
..	Peatland.....	35	41	99	3	3	53.5	26.3	16.3
..	Colsess.....	29	38	91	2	2	46.0	28.8	13.1
Significant Difference 8.7 bus.											
HERBERT ELMER PRYCE, WAWOTA											
7	3	B	Regal.....	26	37	86	3	3	41.0	22.8	12.8
..	Trebi.....	37	36	86	2	2	45.0	32.3	14.2
..	O.A.C. 21.....	31	46	86	2	1	44.5	25.0	13.3
..	Peatland.....	....	35	92	2	2	....	....	....
..	Colsess.....	24	36	86	2	2	46.0	27.0	14.9
Samples Incomplete.											
BERNARD GEORGE JEEVES, DEVERON											
7	7	A	Regal.....	42	34	84	2.6	2.6	47.5	26.0	11.2
..	Trebi.....	52	29	82	1.8	2.2	50.0	37.0	11.9
..	O.A.C. 21.....	38	39	84	2	2	45.0	24.3	11.6
..	Peatland.....	33	33	90	2.2	2	54.0	28.5	14.6
..	Colsess.....	29	33	82	2.2	3	44.0	26.5	13.3
Significant Difference 3.8 bus.											
ALLAN GORDON STRANDLUND, PERCIVAL											
7	8	B	Regal.....	31	36	84	3	3	50.0	30.0	10.3
..	Trebi.....	46	30	84	3	2.4	52.0	41.5	10.4
..	O.A.C. 21.....	31	40	84	2.6	2.4	51.0	27.0	10.8
..	Peatland.....	23	34	84	3	2.4	52.0	23.8	13.9
..	Colsess.....	25	29	81	3	3	43.5	24.8	11.8
Significant Difference 8.2 bus.											
CLARENCE GORDON BLIGH, GERALD											
7	9	A	Regal.....	42	40	84	2.6	2	44.0	22.0	11.4
..	Trebi.....	60	39	85	1	2	48.5	42.0	12.0
..	O.A.C. 21.....	34	42	84	2.8	1	44.0	25.8	12.1
..	Peatland.....	42	40	95	3	2.6	51.5	28.0	15.5
..	Colsess.....	41	37	83	2.2	2.4	43.0	29.3	13.0
Significant Difference 3.7 bus.											
PAUL HENRY PERSSON, STOCKHOLM											
7	9	B	Regal.....	28	....	....	..	..	47.0	24.0	13.4
..	Trebi.....	48	....	....	..	..	48.0	35.5	13.2
..	O.A.C. 21.....	29	....	....	..	..	44.0	24.8	12.9
..	Peatland.....	26	....	....	..	..	54.5	33.5	15.7
..	Colsess.....	35	....	....	..	..	41.5	21.8	14.7
Significant Difference 4.3 bus.											
ALBERT KARL NIEBERGALL, NEUDORF											
7	10	A	Regal.....	33	34	89	2.6	2.4	51.0	30.3	11.5
..	Trebi.....	46	29	89	2.4	1.8	52.5	44.0	11.2
..	O.A.C. 21.....	34	37	87	2.4	2	53.0	30.8	12.9
..	Peatland.....	30	31	87	2.6	2.6	55.5	28.8	14.9
..	Colsess.....	35	30	84	2.6	2.4	45.5	26.8	12.3
Significant Difference 7.3 bus.											

Table No. 1 (Continued)—Cereal Variety Zone 3A

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
DAVID EVANS, DUBUC											
7	10	B	Regal.....	33	31	86	3	3	45.5	23.5	11.8
..	Trebi.....	26	25	88	3	3	47.5	33.0	12.9
..	O.A.C. 21.....	17	35	88	3	2	44.5	22.3	12.6
..	Peatland.....	22	28	90	3	1	50.5	24.5	15.0
..	Colless.....	26	29	....	2	3	40.0	26.5	13.4

Significant Difference 4.8 bus.

PHILIP L. CHENNELLS, WAWOTA

7	3	Key	Regal.....	24	43	....	3	2.4	47.0	29.8	10.8
..	..	..	Trebi.....	48	34	....	2	2.2	49.0	36.8	11.3
..	..	..	O.A.C. 21.....	39	45	....	2	1.2	49.5	26.0	11.7
..	..	..	Peatland.....	37	36	....	3	2	55.5	26.3	14.5
..	..	..	Colless.....	23	38	....	2	3	42.5	23.5	12.7

Significant Difference 7.4 bus.

Tests Discarded on Account of Damage by Hail, Pests, or Other Causes

1	1	B	John Harvey & Clifford Arnold Thomp-son, Carnduff	7	1	B	Murdock Wade Campbell, Fairlight
				7	8	A	Herbert Edwin Park, Rocanville

Note.—The figures and letters before each name represent, in order, the District, Sub-District, and Test Designation.

CEREAL VARIETY ZONE 3B

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
JOHN ROBERT EGILSSON, CALDER											
8	1	A	Regal.....	55	....	....	..	..	50.0	29.3	12.1
..	Treoi.....	55	....	....	..	..	50.5	40.8	12.4
..	O.A.C. 21.....	57	....	....	..	..	49.5	29.0	13.1
..	Peatland.....	25	....	....	..	..	53.0	31.5	15.6
..	Colless.....	40	....	....	..	..	43.5	33.5	14.0

Significant Difference 18.3 bus.

RONALD RICHARD MOFFAT, SALTCOATS

8	2	A	Regal.....	34	34	89	2.4	2.4	52.0	35.8	11.3
..	..	..	Trebi.....	44	29	89	1.4	2.4	50.5	43.8	11.1
..	..	..	O.A.C. 21.....	35	36	89	2.4	1.8	53.0	36.5	11.9
..	..	..	Peatland.....	34	36	92	2.8	2.6	53.0	32.0	14.7
..	..	..	Colless.....	26	30	89	3	3	49.0	28.5	12.5

Significant Difference 7.2 bus.

GEO. W. CALANCHIE, CALDER

8	1	Key	Regal.....	36	42	....	2.4	2	49.0	25.0	12.5
..	..	..	Trebi.....	46	35	....	1.2	2	51.0	40.3	12.7
..	..	..	O.A.C. 21.....	35	45	....	2	1.2	50.0	28.3	13.1
..	..	..	Peatland.....	24	43	....	3	2	52.5	28.3	16.3
..	..	..	Colless.....	27	36	....	2.8	3	43.5	26.3	13.5

Significant Difference 13.9 bus.

Tests Discarded on Account of Damage by Hail, Pests, or Other Causes

8 1 B S. G. Wozny, Calder.

Note.—The figures and letters preceding name represent, in order, the District, Sub-District, and Test Designation

CEREAL VARIETY ZONE 3C

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
EARL M. NORTHGRAVES, BALCARRES											
6	9	A	Regal.....	33	39	90	2	2	48.0	27.8	11.4
..	Trebi.....	47	34	90	2	2	50.0	41.3	11.1
..	O.A.C. 21.....	28	48	92	2.6	1	48.5	27.8	11.9
..	Hannchen.....	40	38	94.6	1.4	3	49.0	31.0	12.0
..	Colless.....	18	30	90	2	3	43.0	28.3	13.6

Significant Difference 8.5 bus.

JOHN R. STILBORN, LORLIE

6	9	B	Regal.....	47	....	....	..	..	47.5	25.3	10.5
..	..	..	Trebi.....	62	....	....	..	..	50.0	38.5	11.5
..	..	..	O.A.C. 21.....	49	....	....	..	..	49.0	33.3	11.4
..	..	..	Hannchen.....	40	....	....	..	..	48.5	30.0	12.5
..	..	..	Colless.....	43	....	....	..	..	43.0	26.0	12.8

Significant Difference 6.9 bus.

Table No. 1 (Continued)—Cereal Variety Zone 3C

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
DAVID G. BIRRELL, FITZMAURICE											
8	2	B	Regal.....	30	30	....	2	2	45.5	26.5	8.9
..	Trebi.....	40	24	....	1.6	1.4	50.5	43.8	9.2
..	O.A.C. 21.....	33	35	....	2.8	2	48.5	28.5	10.0
..	Peatland.....	24	35	....	3	2	51.5	27.5	12.8
..	Colless.....	21	20	....	1.6	2.8	42.0	24.8	10.2
Significant Difference 6.5 bus.											
JACK MATTHEWS, DUFF											
8	3	A	Regal.....	48	39	96	2	2.8	46.5	24.5	11.9
..	Trebi.....	66	33	96	2	2	48.0	39.5	12.2
..	O.A.C. 21.....	43	41	92	1	1.6	46.0	27.5	12.4
..	Peatland.....	40	37	98	2	3	37.5	28.5	15.5
..	Colless.....	45	35	96	2	3	42.5	28.0	14.2
Significant Difference 7.1 bus.											
GEO. W. KOZORIZ, DONWELL											
8	5	A	Regal.....	49	39	....	2.4	1.4	48.5	27.8	11.1
..	Trebi.....	71	33	....	2.6	1.6	50.0	44.3	11.4
..	O.A.C. 21.....	53	40	....	2.8	1.6	48.5	29.0	10.2
..	Peatland.....	49	37	....	2.8	2	53.0	29.3	14.7
..	Colless.....	45	35	....	3	3	44.5	30.8	13.4
Significant Difference 5.8 bus.											
IAIN COWAN MacLEAN, KAMSACK											
8	5	B	Regal.....	37	32	84	2	1	47.0	26.5	12.7
..	Trebi.....	52	23	86	2	2	51.5	42.3	11.7
..	O.A.C. 21.....	31	36	88	2	1	44.0	22.5	12.5
..	Peatland.....	42	33	97	2.8	2	51.0	29.3	16.0
..	Colless.....	26	29	84	2	3	43.0	24.3	14.2
Significant Difference 4.7 bus.											
GEO. IRWIN LOUCKS, INVERMAY											
8	7	A	Regal.....	29	30	87	2	2	46.0	30.3	13.4
..	Trebi.....	36	34	90	2	2	47.5	45.0	14.6
..	O.A.C. 21.....	20	34	86	2	1	46.0	30.0	13.3
..	Peatland.....	43	34	98	2.4	1	54.0	32.5	16.5
..	Colless.....	43	36	85	1	1	49.0	32.5	15.2
Significant Difference 10.8 bus.											
METRO N. SAWCHUK, SHEHO											
8	7	B	Regal.....	32	32	85	3	2	43.5	25.8	11.9
..	Trebi.....	47	30	78	1	2	47.0	39.3	13.2
..	O.A.C. 21.....	27	35	78	3	2	45.0	26.5	11.9
..	Peatland.....	29	31	90	3	2	52.0	31.8	16.8
..	Colless.....	30	27	78	2	3	42.0	27.3	14.1
Significant Difference 3.7 bus.											
STEPHEN KUZIAK, CANORA											
8	9	A	Regal.....	67	42	88	3	3	52.0	34.5	12.6
..	Trebi.....	79	40	88	3	3	52.0	49.8	12.8
..	O.A.C. 21.....	61	47	86	2.8	2.6	52.0	38.5	13.3
..	Peatland.....	53	39	89	2	1.8	53.0	30.0	16.0
..	Colless.....	55	41	85	2.8	1.8	48.0	36.3	13.7
Significant Difference 12.1 bus.											
WILLIAM GRAY, ITUNA											
9	1	B	Regal.....	31	40	94	2.4	2	48.5	33.3	10.8
..	Trebi.....	33	33	95	2.8	2.4	51.0	42.5	11.0
..	O.A.C. 21.....	36	44	94	2.2	1.8	49.0	29.8	11.8
..	Peatland.....	32	38	98	2.4	2	53.0	27.8	14.3
..	Colless.....	39	36	92	1.8	2.6	44.5	30.8	12.6
Significant Difference 7.2 bus.											
MIKE LOUIS LABASH, LESTOCK											
9	3	B	Regal.....	37	38	88	2.4	2.2	47.0	26.8	11.2
..	Trebi.....	44	33	87	2.6	2.8	49.0	41.5	13.1
..	O.A.C. 21.....	40	43	88	2.8	2.8	47.5	30.8	12.0
..	Peatland.....	26	37	90	3	3	48.0	26.5	15.4
..	Colless.....	30	34	86	2.2	2	43.5	29.0	13.3
Significant Difference 7.6 bus.											
GUSTAVE NERENBERG, JANSEN											
9	8	A	Regal.....	34	32	....	2.8	2.4	48.0	34.0	12.2
..	Trebi.....	28	32	....	2.8	2.2	50.5	48.8	12.7
..	O.A.C. 21.....	31	34	....	3	2.2	48.0	31.5	12.1
..	Peatland.....	19	30	....	2.4	2.2	50.0	31.5	16.4
..	Colless.....	18	30	....	1.8	1.8	44.5	31.8	13.6
Significant Difference 6.4 bus.											

Table No. 1 (Continued)—Cereal Variety Zone 3C

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
MISS EDITH LILLIAN VIRGIN, FOAM LAKE											
9	9	A	Regal.....	54	37	....	2	2.2	54.5	36.0	11.8
..	Trebi.....	69	42	....	1	2	53.5	48.5	11.7
..	O.A.C. 21.....	51	43	....	2.8	2	53.5	36.5	12.8
..	Peatland.....	51	38	....	2	2	52.0	26.3	15.4
..	Colless.....	....	36	....	3	3	....	....	....
Colless destroyed by Gopher.											
EWEN M. BEATTIE, FOAM LAKE											
9	9	B	Regal.....	55	40	....	2.4	2.6	46.0	26.5	11.7
..	Trebi.....	69	37	....	2	1.8	47.0	40.5	12.7
..	O.A.C. 21.....	58	46	....	1.6	2.2	46.0	30.0	12.2
..	Peatland.....	42	41	....	1.6	2.2	51.0	29.3	15.8
..	Colless.....	51	36	....	3	3	43.0	29.5	14.0
Significant Difference 8.5 bus.											
JOE V. HELGASON, FOAM LAKE											
9	10	A	Regal.....	31	30	....	2	2	47.0	25.8	14.6
..	Trebi.....	29	30	....	1	2	41.0	29.0	16.1
..	O.A.C. 21.....	23	34	....	1	1	45.5	24.0	14.4
..	Peatland.....	13	30	....	2	1	49.5	26.0	17.7
..	Colless.....	32	33	....	3	3	42.0	28.7	15.7
Significant Difference 3.5 bus.											
HAROLD HORNFORD, ELFROS											
9	10	B	Regal.....	24	27	80	..	..	46.5	26.8	12.8
..	Trebi.....	25	24	77	..	..	48.5	41.3	12.6
..	O.A.C. 21.....	25	28	80	..	..	46.5	28.5	12.9
..	Peatland.....	16	24	80	..	..	50.0	27.0	13.9
..	Colless.....	19	24	80	..	..	44.5	30.3	9.9
Significant Difference 7.2 bus.											
LEON E. GIESELMAN, HUMBOLDT											
13	10	A	Regal.....	46	40	....	2	2	47.5	27.3	13.4
..	Trebi.....	47	39	....	2	1.8	46.5	38.0	15.4
..	O.A.C. 21.....	30	43	....	2	1	45.5	27.0	14.1
..	Peatland.....	24	39	....	2	2	49.5	27.0	16.4
..	Colless.....	38	40	....	2	2.8	46.0	33.5	15.0
Significant Difference 7.9 bus.											
JOHN SAMUEL MYCOCK, HUMBOLDT											
13	10	B	Regal.....	55	....	....	..	..	50.5	33.3	12.5
..	Trebi.....	59	....	....	..	..	49.5	43.5	12.7
..	O.A.C. 21.....	47	....	....	..	..	50.0	31.3	12.8
..	Peatland.....	33	....	....	..	..	51.5	33.8	16.0
..	Colless.....	41	....	....	..	..	46.5	32.8	13.7
Significant Difference 3.8 bus.											
DUNCAN McLEAN, KUROKI											
14	2	A	Regal.....	57	36	....	3	3	50.5	36.3	11.9
..	Trebi.....	64	33	....	1	1	49.0	41.8	12.8
..	O.A.C. 21.....	47	39	....	2	3	47.5	30.3	12.2
..	Peatland.....	51	34	....	3	1	53.5	30.6	15.2
..	Colless.....	56	33	....	2	3	45.5	34.5	13.6
Samples Incomplete.											
LORNE EDWARD DIETRICK, LEROY											
14	3	A	Regal.....	80	41	....	2.2	2.8	51.0	36.3	12.2
..	Trebi.....	83	37	....	1	2.6	51.0	56.0	12.0
..	O.A.C. 21.....	68	41	....	1.4	2.8	50.0	42.5	13.3
..	Peatland.....	44	39	....	1.4	2.4	50.0	29.3	16.0
..	Colless.....	62	36	....	1	3	49.0	34.5	14.4
Significant Difference 13.9 bus.											
MAX EARNEST PUTNAM, WATSON											
14	3	B	Regal.....	78	40	96	3	3	49.0	31.5	12.0
..	Trebi.....	85	33	93	1.8	1	50.0	43.5	12.5
..	O.A.C. 21.....	65	40	96	3	3	47.5	29.8	12.1
..	Peatland.....	52	39	98	3	3	51.5	30.5	12.2
..	Colless.....	63	38	89	2	2	45.0	32.3	14.2
Significant Difference 8.4 bus.											
SYLVESTER MAMER, LAKE LENORE											
14	4	A	Regal.....	66	39	....	1.8	2.2	51.6	33.8	12.1
..	Trebi.....	66	38	....	1.6	2	51.0	47.0	12.3
..	O.A.C. 21.....	55	41	....	1.6	1.8	51.0	30.8	12.2
..	Peatland.....	40	39	....	2.6	2.8	52.5	28.0	11.9
..	Colless.....	49	39	....	2	2.4	49.5	34.8	13.7
Significant Difference 5.4 bus.											

Table No. 1 (Continued)—Cereal Variety Zone 3C

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
ARTHUR HOFFMAN, ANNAHEIM											
14	4	B	Regal.....	54	36	96.6	3	2.8	48.0	34.3	12.7
"	"	"	Trebi.....	66	30	94	2	2	48.0	46.0	12.2
"	"	"	O.A.C. 21.....	52	33	95.4	2.6	2.4	48.0	35.3	13.3
"	"	"	Peatland.....	35	34	96.8	2.8	2.6	48.5	26.8	15.7
"	"	"	Colsess.....	31	33	95	3	3	46.5	32.8	14.4
Significant Difference 7.3 bus.											

GEO. ALEXANDER STRACHAN, PLEASANTDALE

14	5	B	Regal.....	77	39	87	2.2	2.8	49.0	37.8	9.0
"	"	"	Trebi.....	97	28	89	2.2	2	50.0	53.3	10.1
"	"	"	O.A.C. 21.....	45	36	89	2	1	50.5	36.5	10.7
"	"	"	Peatland.....	48	42	89	3	3	51.0	30.8	13.0
"	"	"	Colsess.....	64	36	83	2	3	45.5	35.5	12.5

WM. UNTERSCHUTE, MELVILLE

8	3	Key	Regal.....	51	40	85	1.4	3	51.0	28.5	12.3
"	"	"	Trebi.....	56	32	85	1.6	3	52.5	42.8	12.2
"	"	"	O.A.C. 21.....	51	45	85	1	2.4	52.0	28.5	12.8
"	"	"	Peatland.....	35	37	85	3	3	53.5	27.0	15.1
"	"	"	Colsess.....	38	32	80	2.4	3	47.5	30.8	13.7

Significant Difference 5.7 bus.

C. L. LITTLE, MIDDLE LAKE

13	10	Key	Regal.....	92	46	97	2.8	2.6	53.5	37.0	11.0
"	"	"	Trebi.....	80	39	95	2.2	1.6	52.0	51.3	11.2
"	"	"	O.A.C. 21.....	75	48	95	2	2	52.5	41.0	11.9
"	"	"	Peatland.....	51	45	95	2.6	2.2	54.0	27.5	14.9
"	"	"	Colsess.....	67	45	94	3	2.6	50.5	36.3	12.4

Significant Difference 8.7 bus.

R. T. GECK, KELVINGTON

14	10	Key	Regal.....	63	40	82	2	2	48.0	27.5	13.5
"	"	"	Trebi.....	89	34	78	3	3	50.0	43.8	12.8
"	"	"	O.A.C. 21.....	56	40	76	1	1	49.5	32.5	13.0
"	"	"	Peatland.....	50	40	82	2	2	52.0	30.0	16.3
"	"	"	Colsess.....	50	36	76	3	3	45.5	31.8	14.3

Significant Difference 4.6 bus.

Tests Discarded on Account of Damage by Pests, Hail, or Other Causes

8	3	B	Victor Louis Molnar, McKim	8	6	B	Metro Yakiw Danylehuk, Canora
8	4	A	Wm. Henry Wilkinson, Yorkton	9	1	A	Wm. Thompson, Ituna
8	4	B	Dan Matthew Draper, Yorkton	14	5	A	Walter Foushe, Spalding

Note.—The figures and letters before each name represent, in order, the District, Sub-District, and Test Designation.

CEREAL VARIETY ZONE 3D

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
SELMAN WAHL BOYD, MELFORT											
14	7	A	Regal.....	46	36	90	3	2.8	50.5	32.0	13.1
"	"	"	Trebi.....	54	32	86	2	2	47.5	43.0	13.8
"	"	"	O.A.C. 21.....	30	36	90	3	2.5	47.5	28.0	13.9
"	"	"	Peatland.....	27	32	90	2.5	2	51.5	27.8	16.9
"	"	"	Colsess.....	41	32	86	2	2	44.5	33.8	14.3
Samples incomplete.											

JOHN BERNARD BOYLE, KINISTINO

15	1	A	Regal.....	41	38	....	2.8	2.6	53.5	37.8	11.5
"	"	"	Trebi.....	46	35	....	2	2.4	48.0	43.0	12.1
"	"	"	O.A.C. 21.....	22	40	....	3	1.2	50.5	32.8	12.0
"	"	"	Peatland.....	26	37	....	3	2	53.0	29.5	14.8
"	"	"	Colsess.....	37	36	....	3	3	45.5	34.5	11.9

Significant Difference 4.5 bus.

WM. DOUGLAS STEVENSON, BIRCH HILLS

15	1	B	Regal.....	59	40	93	2.2	2	52.0	33.5	12.9
"	"	"	Trebi.....	62	35	91	2.6	1.8	51.0	44.3	12.1
"	"	"	O.A.C. 21.....	57	46	94	1.8	1.2	53.5	29.3	14.2
"	"	"	Peatland.....	41	41	92	3	1.6	52.0	30.5	15.0
"	"	"	Colsess.....	46	38	91	2.6	3	50.5	37.5	12.6

Significant Difference 7.8 bus.

Table No. 1 (Continued)—Cereal Variety Zone 3D

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
PHILIP PARSON, RED DEER HILL											
15	2	A	Regal.....	25	37	....	2	2	52.0	34.3	13.6
..	Trebi.....	24	33	....	2.6	2.4	50.5	49.0	13.2
..	O.A.C. 21.....	24	39	....	1.6	1	51.5	34.5	13.1
..	Peatland.....	15	35	....	2.6	2.6	51.0	30.0	16.1
..	Colsess.....	28	34	....	2.6	3	48.0	36.8	14.9
Significant Difference 9.4 bus.											

ROBERT BEVERLEY BEATTIE, KINISTINO											
15	10	A	Regal.....	57	36	93	3	2.6	52.0	36.8	13.0
..	..	..	Trebi.....	65	29	91	2	2	51.0	45.0	12.9
..	..	..	O.A.C. 21.....	54	40	91	2	1.2	53.5	37.0	12.5
..	..	..	Peatland.....	33	33	92	3	2.2	52.0	29.3	16.0
..	..	..	Colsess.....	43	34	90	1	3	50.0	35.0	14.5
Significant Difference 5.3 bus.											

PAUL ANTON WIEMKEN, WHITOME											
15	10	B	Regal.....	31	27	92	2.4	2.4	55.0	43.8	9.9
..	..	..	Trebi.....	41	22	91	2.4	3	50.0	54.0	9.3
..	..	..	O.A.C. 21.....	27	30	90	2.6	1.8	54.0	34.5	10.8
..	..	..	Peatland.....	22	28	86	2.4	1.4	55.5	29.3	11.6
..	..	..	Colsess.....	25	22	86	1.8	3	50.0	34.8	10.9
Significant Difference 4.8 bus.											

CHESTER BACON, KINISTINO											
15	1	Key	Regal.....	53	36	90	2.6	3	55.0	37.0	10.5
..	..	..	Trebi.....	51	29	....	1.6	2	53.0	47.3	9.2
..	..	..	O.A.C. 21.....	34	35	....	1	1	53.0	31.5	10.6
..	..	..	Peatland.....	39	37	....	2.8	3	54.5	29.3	12.6
..	..	..	Colsess.....	37	31	....	2.8	3	50.0	34.8	11.0
Significant Difference 7.7 bus.											

CEREAL VARIETY ZONE 3E

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
JAS. WM. HAROLD WELLS, MARSDEN											
12	8	A	Regal.....	20	27	95	3	3	54.0	30.0	14.4
..	Trebi.....	37	21	91	3	3	50.5	41.0	13.4
..	O.A.C. 21.....	17	21	97	3	2	50.5	28.0	13.4
..	Hannchen.....	27	23	97	3	3	51.5	33.0	12.6
..	Colsess.....	18	22	95	3	3	49.0	33.8	14.4
Significant Difference 3.7 bus.											

CLEMENT COLLINS WAKEFIELD, LILYDALE											
12	8	B	Regal.....	32	32	93	3	2	51.5	34.3	14.6
..	..	..	Trebi.....	45	28	92	3	3	50.5	43.3	13.0
..	..	..	O.A.C. 21.....	27	32	93	3	2	50.5	36.0	15.1
..	..	..	Hannchen.....	39	29	96	3	2.2	55.0	39.3	14.2
..	..	..	Colsess.....	33	30	86	3	3	48.0	32.8	14.3
Significant Difference 6.5 bus.											

GERARD WILLIAM WEHRHAHN, ROCKHAVEN											
12	9	B	Regal.....	40	31	85	2.6	2.6	54.5	38.0	15.5
..	..	..	Trebi.....	43	27	86	2.8	2.6	51.0	46.0	15.6
..	..	..	O.A.C. 21.....	34	29	86	1.6	1.2	52.5	39.0	15.6
..	..	..	Hannchen.....	36	25	87	2	2.4	55.5	42.0	17.5
..	..	..	Colsess.....	36	27	85	2.8	2.8	48.0	35.0	16.6
Significant Difference 9.4 bus.											

CLIFFORD J. SIMPSON, BATTLEFORD											
12	10	A	Regal.....	30	26	95	3	2.8	51.5	36.0	14.2
..	..	..	Trebi.....	36	25	93	3	2	48.0	33.8	14.3
..	..	..	O.A.C. 21.....	21	25	96	2.8	2	54.0	27.3	14.2
..	..	..	Hannchen.....	27	24	102	3	2.4	56.0	34.5	15.8
..	..	..	Colsess.....	24	24	94	2	2.6	46.0	30.0	15.3
Significant Difference 5.5 bus.											

BRUCE EVANS SMITH, BATTLEFORD											
12	10	B	Regal.....	15	21	....	3	3	55.0	33.8	16.4
..	..	..	Trebi.....	18	19	....	1.6	2	45.5	26.5	17.7
..	..	..	O.A.C. 21.....	14	21	....	1.6	1.8	52.0	38.0	15.7
..	..	..	Hannchen.....	18	18	....	3	3	56.0	35.0	17.7
..	..	..	Colsess.....	18	20	....	2.8	2.8	46.0	28.8	17.8
Significant Difference 4.6 bus.											

Table No. 1 (Continued)—Cereal Variety Zone 3E

Dist.	Sub-dist.	Test designation	Variety	Yield bus. acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
NICK J. YOUZWA, WAKAW											
13	9	B	Regal.....	44	30	....	2.2	2.2	50.5	28.5	12.3
..	Trebi.....	48	28	....	3	3	47.0	40.5	12.2
..	O.A.C. 21.....	38	34	....	2.6	2.8	50.5	28.5	12.0
..	Peatland.....	26	26	....	2.4	2.2	52.5	27.0	15.1
..	Colsess.....	36	32	....	2.2	2.2	44.0	31.0	13.6
Significant Difference 5.3 bus.											
GASTON DUPUIS, HOEY											
15	2	B	Regal.....	43	42	....	2.4	2.4	49.0	30.5	15.7
..	Trebi.....	50	41	....	2	2.4	44.5	36.3	15.4
..	O.A.C. 21.....	34	42	....	2.6	1	46.0	26.3	14.3
..	Peatland.....	23	38	....	2.6	2	49.5	23.0	18.4
..	Colsess.....	41	39	....	2.6	2.4	44.5	30.8	14.8
Significant Difference 6.6 bus.											
FRANCOIS BLANCHARD, JR., DUCK LAKE											
15	3	A	Regal.....	....	38	76	2.6	2.6	47.5	27.0	12.9
..	Trebi.....	....	32	78	2.4	2	44.0	33.0	13.9
..	O.A.C. 21.....	....	40	74	2	1	42.0	23.5	13.7
..	Peatland.....	....	37	79	1.8	2	46.5	25.5	15.4
..	Colsess.....	....	38	75	1.8	2.8	41.5	28.5	14.9
Damaged by Wind. Samples Incomplete.											
HENRY BARRE, DUCK LAKE											
15	3	B	Regal.....	35	30	....	3	2.2	47.5	24.5	13.3
..	Trebi.....	36	26	....	2	2.4	46.5	33.0	14.6
..	O.A.C. 21.....	32	29	....	2	1.4	46.0	24.5	13.2
..	Peatland.....	17	25	....	3	1.2	49.0	24.5	15.5
..	Colsess.....	18	30	....	2.6	3	44.5	28.5	14.6
Significant Difference 8.1 bus.											
DOUGLAS CAMERON BROOKS, ROSTHERN											
15	4	A	Regal.....	13	35	91	3	3	53.0	36.3	14.7
..	Trebi.....	19	31	90	2.6	2.6	47.5	38.3	14.9
..	O.A.C. 21.....	12	32	89	2.6	1.6	46.5	27.5	15.0
..	Peatland.....	11	33	89	2.8	1.2	48.0	33.0	16.0
..	Colsess.....	28	41	90	3	3	44.5	32.5	15.6
Samples Incomplete.											
JOHN GILBERT RAHIER, CARLTON											
15	4	B	Regal.....	65	40	93	1.6	2.6	53.0	37.3	13.3
..	Trebi.....	89	35	83	1.2	2.6	51.0	44.8	12.7
..	O.A.C. 21.....	55	47	92	1.6	1.2	52.0	39.0	13.3
..	Peatland.....	39	39	97	2.6	2.2	54.0	31.5	16.5
..	Colsess.....	54	37	84	2	2.8	48.0	35.0	13.7
Significant Difference 8.3 bus.											
STUART JAMES LEASK, MARCELIN											
15	5	A	Regal.....	36	32	....	3	2.8	52.5	36.8	14.4
..	Trebi.....	39	29	....	2	3	48.5	33.8	13.3
..	O.A.C. 21.....	27	33	....	2.8	1.4	53.0	36.3	13.7
..	Peatland.....	19	27	....	3	2.2	53.0	30.0	17.4
..	Colsess.....	28	31	....	2.8	3	48.5	33.8	14.5
Significant Difference 5.7 bus.											
LAWRENCE ERNEST McKELLER, RADISSON											
16	1	A	Regal.....	41	28	94	3	3	52.5	28.8	14.3
..	Trebi.....	45	26	77	3	3	51.0	42.5	13.8
..	O.A.C. 21.....	35	32	94	1.8	1	52.0	30.8	13.7
..	Peatland.....	23	25	94	3	1	55.0	27.5	16.6
..	Colsess.....	39	28	77	3	3	46.0	33.0	14.7
Significant Difference 6.2 bus.											
THOMAS ARNOLD LARSEN, BORDEN											
16	1	B	Regal.....	31	30	83	3	3	53.5	28.8	15.0
..	Trebi.....	37	28	78	2.4	2.2	47.0	32.8	15.6
..	O.A.C. 21.....	24	32	79	2.8	1.2	49.5	28.0	15.0
..	Peatland.....	19	29	82	3	1	54.5	26.3	17.8
..	Colsess.....	29	30	79	3	2.8	43.5	27.3	15.9
Significant Difference 6.1 bus.											
EDWARD PHILIP HUEDEK, HAFFORD											
16	2	A	Regal.....	43	33	102	3	2.6	50.0	32.8	13.8
..	Trebi.....	49	30	94	3	2.8	47.0	40.0	13.1
..	O.A.C. 21.....	36	35	99	2.4	1.6	49.0	29.3	14.2
..	Peatland.....	26	28	99	3	1.2	48.5	26.8	16.8
..	Colsess.....	34	30	95	3	3	45.0	32.0	14.5
Significant Difference 9.7 bus.											

Table No. 1 (Continued)—Cereal Variety Zone 3E

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ling to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in percentage
GLEN H. LAYMAN, SPEERS											
16	2	B	Regal.....	29	24	91	3	3	50.5	34.3	14.0
"	"	"	Trebi.....	34	23	79	2	1	44.5	31.8	14.4
"	"	"	O.A.C. 21.....	29	25	87	1	1	50.0	31.3	12.9
"	"	"	Peatland.....	11	20	85	2	3	50.0	25.0	16.8
"	"	"	Colsess.....	31	24	83	3	3	45.5	32.3	13.5
Significant Difference 4.5 bus.											
WILLIAM JAMES LINDSAY, REDFIELD											
16	3	A	Regal.....	15	19	95	3	2.8	54.0	29.5	14.9
"	"	"	Trebi.....	21	20	91	2	2.6	50.0	32.0	14.7
"	"	"	O.A.C. 21.....	11	19	95	3	1.2	53.5	26.5	14.7
"	"	"	Peatland.....	6	19	95	3	1.2	54.5	29.0	16.2
"	"	"	Colsess.....	16	19	94	3	3	46.0	34.0	15.2
Significant Difference 4.3 bus.											
DOUGLAS CLIFFORD AXWORTHY, NORTH BATTLEFORD											
16	3	B	Regal.....	50	33	....	3	3	54.5	34.5	15.1
"	"	"	Trebi.....	49	26	....	3	2.8	51.5	41.3	15.6
"	"	"	O.A.C. 21.....	34	35	....	2.4	1	52.0	31.3	14.6
"	"	"	Peatland.....	26	29	....	3	1	52.5	27.0	18.1
"	"	"	Colsess.....	48	30	....	3	3	54.5	32.5	15.5
Significant Difference 5.6 bus.											
DOUGLAS GORDON EDGELOW, MEOTA											
16	4	A	Regal.....	36	35	92	2.6	2.4	54.5	36.8	15.3
"	"	"	Trebi.....	48	26	88	2.6	2	52.0	45.3	14.6
"	"	"	O.A.C. 21.....	36	36	87	1.6	1	54.0	37.0	14.8
"	"	"	Peatland.....	23	30	89	2.2	1	54.0	29.8	17.6
"	"	"	Colsess.....	35	27	86	2.8	2.8	50.5	35.0	15.3
Significant Difference 8.8 bus.											
MISS IRENE GRANT, EDAM											
16	4	B	Regal.....	25	22	94	2.8	2.8	55.0	31.0	15.0
"	"	"	Trebi.....	23	19	94	2.4	3	50.5	33.8	15.0
"	"	"	O.A.C. 21.....	20	20	94	2.6	1.2	54.0	28.3	14.8
"	"	"	Peatland.....	9	19	94	3	1.2	55.0	29.0	16.8
"	"	"	Colsess.....	23	21	92	3	3	48.0	30.0	16.0
Significant Difference 3.1 bus.											
WALTER BEDFORD JOHNSTON, MAIDSTONE											
16	5	A	Regal.....	10	24	79	..	..	54.0	32.5	15.2
"	"	"	Trebi.....	16	24	77	..	..	49.0	33.5	15.6
"	"	"	O.A.C. 21.....	13	20	81	..	..	52.0	28.3	14.7
"	"	"	Peatland.....	3	16	82	..	..	53.0	30.0	16.7
"	"	"	Colsess.....	22	24	78	..	..	47.0	31.3	15.9
Significant Difference 6.1 bus.											
JOHN ANGUS CURRIE, BRESAYLOR											
16	5	B	Regal.....	46	31	....	3	2.4	53.0	33.8	15.3
"	"	"	Trebi.....	48	29	....	3	2.8	48.5	40.0	15.5
"	"	"	O.A.C. 21.....	35	32	....	2.6	1	51.5	31.5	15.0
"	"	"	Peatland.....	22	27	....	3	1	53.0	27.3	18.2
"	"	"	Colsess.....	42	31	....	3	3	46.0	32.3	15.7
Samples Incomplete.											
GILBERT HENRY WESSON, MAIDSTONE											
16	5	C	Regal.....	11	20	....	..	..	53.5	39.0	14.6
"	"	"	Trebi.....	24	18	....	..	..	47.5	28.3	14.3
"	"	"	O.A.C. 21.....	14	21	....	..	..	52.5	30.0	14.2
"	"	"	Peatland.....	8	19	....	..	..	53.0	30.8	17.4
"	"	"	Colsess.....	13	19	....	..	..	47.0	30.8	16.1
Significant Difference 6.8 bus.											
JAMES ALFRED RICHARDS, LASHBURN											
16	6	A	Regal.....	29	19	86	2.6	2.6	54.0	33.3	15.3
"	"	"	Trebi.....	24	17	86	3	2.4	50.0	38.0	15.6
"	"	"	O.A.C. 21.....	25	20	86	2.2	1.2	54.5	32.0	14.8
"	"	"	Peatland.....	14	19	87	2.2	1.4	54.5	27.9	18.5
"	"	"	Colsess.....	27	19	86	3	2.8	46.0	31.8	15.1
Significant Difference 10.3 bus.											
FRANK JOHN SUTTON, MARSHALL											
16	6	B	Regal.....	7	....	....	..	..	46.0	29.3	15.0
"	"	"	Trebi.....	21	....	....	..	..	48.0	40.5	13.6
"	"	"	O.A.C. 21.....	5	....	....	..	..	44.5	26.5	14.3
"	"	"	Peatland.....	2	....	....	..	..	....	....	....
"	"	"	Colsess.....	10	....	....	..	..	44.5	29.0	15.3
Significant Difference 4.1 bus.											

Table No. 1 (Continued)—Cereal Variety Zone 3E

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
JAMES G. COCKBURN, TURTLEFORD											
16	8	B	Regal.....	20	26	....	2.8	2.4	53.5	42.5	16.3
..	Trebi.....	19	23	....	1.8	1.6	51.0	49.0	15.4
..	O.A.C. 21.....	18	26	....	1.8	1.4	53.0	45.5	15.7
..	Peatland.....	11	23	....	1.2	1	51.5	31.8	19.0
..	Colsess.....	25	22	....	2.8	2.8	50.5	38.3	16.0
Significant Difference 3.5 bus.											

JOHNNIE UNRAU, MULLINGAR											
16	10	A	Regal.....	34	26	98	3	3	50.5	35.5	12.8
..	..	..	Trebi.....	33	23	92	3	3	47.0	37.3	13.6
..	..	..	O.A.C. 21.....	22	25	96	3	1.8	49.0	27.0	13.0
..	..	..	Peatland.....	14	23	96	3	1	50.0	30.0	17.5
..	..	..	Colsess.....	30	25	90	3	3	44.0	36.0	15.0
Significant Difference 5.3 bus.											

CHARLES McINTYRE, MARSDEN											
12	12	Key	Regal.....	19	22	93	3	2.8	54.0	34.5	14.8
..	..	..	Trebi.....	40	21	92	3	3	50.5	43.3	12.8
..	..	..	O.A.C. 21.....	27	22	95	2.2	2.2	53.0	31.5	14.1
..	..	..	Hannchen.....	35	22	96	2	2	50.0	40.3	14.9
..	..	..	Colsess.....	16	20	90	2.8	2.8	48.5	36.3	13.8
Significant Difference 14.1 bus.											

WILLIAM R. MAIR, PRINCE											
16	..	Key	Regal.....	56	30	85	3	3	50.0	33.8	14.8
..	..	..	Trebi.....	55	28	81	3	3	51.5	43.0	14.8
..	..	..	O.A.C. 21.....	41	30	85	3	3	54.5	30.0	13.9
..	..	..	Peatland.....	29	25	87	2	1	52.5	27.3	17.1
..	..	..	Colsess.....	44	28	81	3	3	48.0	33.3	15.5
Significant Difference 4.2 bus.											

FRED TOWNLEY SMITH, LASHBURN											
16	..	Key	Regal.....	26	25	91	3	3	52.0	32.8	13.6
..	..	..	Trebi.....	36	21	87	3	3	50.5	41.8	14.0
..	..	..	O.A.C. 21.....	22	20	91	3	1	51.5	26.8	14.1
..	..	..	Peatland.....	10	23	92	3	3	54.0	28.8	16.6
..	..	..	Colsess.....	26	22	87	3	3	47.5	32.8	14.6
Significant Difference 3.5 bus.											

Tests Discarded on Account of Damage by Hail, Pests, or Other Causes

12 7 A Jack Bryson, Unity 12 9 A Murray Bullerwell, Tatsfield

Note.—The figures and letters before each name represent, in order, the District, Sub-District, and Test Designation.

CEREAL VARIETY ZONE 4A

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
MISS MARGUERITE AGNES McDONALD, TADMORE											
8	6	A	Regal.....	42	39	86	3	2	50.0	28.5	12.4
..	Trebi.....	50	35	86	1	2.8	47.5	34.8	14.4
..	O.A.C. 21.....	38	37	87	2	2	49.0	33.8	12.6
..	Peatland.....	30	36	89	1	3	53.0	28.0	15.9
..	Colsess.....	42	36	85	3	3	47.5	33.3	13.6
Significant Difference 7.9 bus.											

FRANK TANNER, HINCHLIFFE											
8	8	B	Regal.....	30	28	86	2.8	2.2	48.5	36.8	12.2
..	..	..	Trebi.....	37	25	86	3	2.8	50.0	48.5	12.1
..	..	..	O.A.C. 21.....	31	30.2	86	2.6	1.6	50.0	35.3	9.5
..	..	..	Peatland.....	18	28	86	3	3	52.0	28.3	15.0
..	..	..	Colsess.....	19	25	78	3	3	47.0	34.3	10.3
Significant Difference 4.3 bus.											

MISS OLGA BABUIK, NORQUAY											
8	9	B	Regal.....	74	38	....	1.8	1.8	51.5	36.8	12.5
..	..	..	Trebi.....	65	36	....	1.2	1.4	52.0	52.8	12.5
..	..	..	O.A.C. 21.....	73	41	....	1.2	1.4	51.0	40.5	12.7
..	..	..	Peatland.....	59	40	....	2.4	1.4	53.0	32.0	14.3
..	..	..	Colsess.....	49	37	....	1.4	1.2	46.0	34.8	13.0
Significant Difference 9.7 bus.											

Table No. 1 (Continued)—Cereal Variety Zone 4A

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
LOUIS EDWARD F. JOHN PILGRIM, PELLY											
8	10	A	Regal.....	53	39	81	1.2	2	46.5	25.8	12.4
"	"	"	Trebi.....	76	34	79	1	2	51.0	39.3	12.7
"	"	"	O.A.C. 21.....	55	42	81	1.6	1	49.5	30.3	8.9
"	"	"	Peatland.....	50	36	87	3	3	55.0	30.5	16.2
"	10	B	Colsess.....	55	38	79	1.2	3	43.5	28.0	16.2
Significant Difference 10.8 bus.											
STANLEY NIMETZ, ARRAN											
8	10	B	Regal.....	39	29	92	1.6	1.2	50.5	44.3	10.1
"	"	"	Trebi.....	60	24	94	2.4	2.2	50.0	44.0	10.4
"	"	"	O.A.C. 21.....	43	35	93	2.8	1.4	47.0	27.5	11.7
"	"	"	Peatland.....	39	31	97	2.4	2.6	47.5	30.5	12.4
"	"	"	Colsess.....	30	27	91	1.4	1.2	44.0	29.5	11.8
Significant Difference 14.5 bus.											
HOMER COMEGYS, WAKAW											
13	9	A	Regal.....	32	....	....	..	..	51.0	34.5	13.1
"	"	"	Trebi.....	53	....	....	..	..	49.5	40.0	12.7
"	"	"	O.A.C. 21.....	30	....	....	..	..	50.5	33.3	13.0
"	"	"	Peatland.....	21	....	....	..	..	52.0	26.5	16.0
"	"	"	Colsess.....	36	....	....	..	..	45.0	33.0	14.2
Sample Incomplete.											
OLE J. TROBAK, LINTLAW											
14	1	A	Regal.....	51	40	89	1.4	2.2	51.0	28.8	12.7
"	"	"	Trebi.....	68	39	95	2	3	48.5	53.5	12.8
"	"	"	O.A.C. 21.....	51	41	91	2	3	52.0	41.5	13.0
"	"	"	Peatland.....	48	41	97	3	3	53.5	31.3	14.8
"	"	"	Colsess.....	62	38	86	2.6	3	48.0	35.0	13.8
Significant Difference 9.2 bus.											
WALTER FORD, KELVINGTON											
14	1	B	Regal.....	35	31	97	1.6	1.6	48.5	28.0	11.7
"	"	"	Trebi.....	49	27	97	1.8	2	48.5	40.5	12.4
"	"	"	O.A.C. 21.....	30	30	96	1.4	1.8	46.5	33.3	11.7
"	"	"	Peatland.....	31	32	97	3	3	48.5	30.8	14.3
"	"	"	Colsess.....	27	28	96	2.6	2.4	42.0	26.3	13.3
Significant Difference 6.9 bus.											
HARVEY PERCIVAL DAINBROUGH, NUT MOUNTAIN											
14	2	B	Regal.....	44	32	89	2	2	50.5	35.0	10.1
"	"	"	Trebi.....	42	24	89	3	3	51.0	50.7	10.1
"	"	"	O.A.C. 21.....	47	36	89	1	1	51.5	36.0	11.8
"	"	"	Peatland.....	33	28	89	3	3	52.5	29.0	12.6
"	"	"	Colsess.....	34	24	82	3	3	47.0	31.8	11.3
Significant Difference 4.7 bus.											
CLAYTON ALBERT ANGELL, ROSE VALLEY											
14	6	A	Regal.....	86	30	....	..	..	53.0	37.5	12.9
"	"	"	Trebi.....	97	31	....	..	..	50.0	46.5	13.3
"	"	"	O.A.C. 21.....	72	29	....	..	..	51.5	39.8	13.6
"	"	"	Peatland.....	58	26	....	..	..	50.0	46.5	13.3
"	"	"	Colsess.....	75	30	....	..	..	47.0	35.5	13.5
Significant Difference 7.9 bus.											
ROBERT FRANCIS HEUGH, McKAGUE											
14	6	B	Regal.....	13	18	....	..	3	53.0	34.5	12.0
"	"	"	Trebi.....	21	16	....	..	2	53.5	50.3	9.5
"	"	"	O.A.C. 21.....	17	16	....	..	2	52.5	33.8	11.5
"	"	"	Peatland.....	12	18	....	..	3	56.0	31.0	13.4
"	"	"	Colsess.....	17	12	....	..	3	50.0	37.8	11.3
Significant Difference 4.5 bus.											
ARTHUR LESLIE HARRIS, STAR CITY											
14	7	B	Regal.....	58	38	93	3	3	53.5	39.5	11.1
"	"	"	Trebi.....	89	31	94	3	3	52.0	50.0	9.6
"	"	"	O.A.C. 21.....	61	41	91	3	3	53.0	39.0	11.5
"	"	"	Peatland.....	51	38	90	3	2	55.0	30.5	12.4
"	"	"	Colsess.....	56	36	90	3	3	49.0	35.5	11.8
Significant Difference 5.7 bus.											
DOUGLAS FOY, BJORKDALE											
14	8	A	Regal.....	41	22	82	1	2	50.5	35.8	9.0
"	"	"	Trebi.....	59	20	82	3	3	51.5	54.3	8.4
"	"	"	O.A.C. 21.....	37	24	82	3	3	50.5	37.5	9.8
"	"	"	Peatland.....	34	22	82	2	2	52.0	30.8	11.8
"	"	"	Colsess.....	38	20	78	1.8	3	47.0	35.0	10.1
Significant Difference 4.5 bus.											

Table No. 1 (Continued)—Cereal Variety Zone 4A

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seed-ing to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in per-centage
ROBERT CHAS. IVAN JACKSON, SYLVANIA											
14	8	B	Regal.....	63	30	95	1	1	51.5	36.3	12.6
..	Trebi.....	68	27	93	1.8	2	51.0	56.8	10.0
..	O.A.C. 21.....	55	31	94	1	1	52.5	36.8	12.1
..	Peatland.....	52	32	98	3	3	52.5	31.8	14.6
..	Colsess.....	39	27	93	2	2	47.5	36.0	13.4
Significant Difference 9.6 bus.											
JOHN LLEWELLYN GARRAWAY, NEW OSGOOD											
14	9	A	Regal.....	48	31	84	3	3	52.0	38.0	9.9
..	Trebi.....	55	31	78	3	2	50.0	47.3	8.8
..	O.A.C. 21.....	43	32	79	3	2	51.0	36.8	10.2
..	Peatland.....	32	30	80	3	2.2	53.0	31.5	12.0
..	Colsess.....	39	30	82	3	3	47.0	36.5	10.4
Significant Difference 5.4 bus.											
ELTON McDONALD, ARMLEY											
14	9	B	Regal.....	63	41	....	3	2	54.5	40.8	9.9
..	Trebi.....	71	35	....	3	2	52.5	53.0	8.5
..	O.A.C. 21.....	62	38	....	3	1	53.0	43.0	10.3
..	Peatland.....	43	36	....	3	2	53.0	32.0	11.7
..	Colsess.....	34	39	....	3	2	50.0	39.8	10.6
Significant Difference 13.9 bus.											
JAMES NORMAN BAYLISE, LOST RIVER											
14	10	A	Regal.....	33	25	76	3	2.2	54.0	29.0	13.8
..	Trebi.....	41	23	74	2.8	2.4	47.0	33.5	15.7
..	O.A.C. 21.....	28	25	78	3	1.4	49.0	26.3	14.6
..	Peatland.....	20	23	84	3	1.2	51.5	28.8	17.1
..	Colsess.....	25	25	93	3	3	44.0	30.3	15.0
Significant Difference 4.7 bus.											
MERVYN A. RUSK, WHITE FOX											
14	10	B	Regal.....	63	46	90	3	3	55.5	36.3	14.9
..	Trebi.....	91	41	89	1	1.8	53.6	48.0	13.3
..	O.A.C. 21.....	42	43	89	1	1	54.0	39.0	19.2
..	Peatland.....	38	45	89	2.6	2.2	53.5	30.0	17.4
..	Colsess.....	66	44	88	3	3	50.0	35.8	13.6
Significant Difference 12.6 bus.											
DAVID SINCLAIR MITCHELL, WHITE STAR											
15	9	A	Regal.....	90	37	91	1.6	2.2	52.5	37.5	13.7
..	Trebi.....	73	36	90	1.4	2.6	50.5	47.3	13.1
..	O.A.C. 21.....	81	36	90	1.4	1.6	52.5	40.5	13.1
..	Peatland.....	49	37	91	2.2	1.8	52.5	30.5	15.2
..	Colsess.....	64	36	90	2	3	47.5	34.3	14.2
Significant Difference 11.0 bus.											
THEODORE PACZAY, PADDOCKWOOD											
15	9	B	Regal.....	50	34	96	2	2.6	51.5	37.5	8.7
..	Trebi.....	56	27	91	3	2.6	52.0	54.0	7.7
..	O.A.C. 21.....	46	37	91	1.8	1	51.0	41.3	8.9
..	Peatland.....	32	31	91	2.2	2.4	53.0	30.8	11.2
..	Colsess.....	41	30	86	2	2	49.0	38.8	10.8
Significant Difference 4.0 bus.											
CHAS. WEGMILLER, LEACROSS											
14	9	Key	Regal.....	84	40	87	3	3	53.0	38.8	12.8
..	Trebi.....	94	35	85	2.4	2.8	51.5	45.0	11.5
..	O.A.C. 21.....	68	42	86	2	2	51.0	39.3	12.4
..	Peatland.....	54	37	86	2.8	2	51.5	31.3	14.9
..	Colsess.....	70	35	83	3	3	48.5	37.5	13.5
Significant Difference 10.3 bus.											
G. L. ENDICOTT, PADDOCKWOOD											
15	9	Key	Regal.....	59	36	86	3	3	51.5	32.8	13.5
..	Trebi.....	64	34	86	1.8	2.8	46.0	34.5	13.8
..	O.A.C. 21.....	52	39	86	1.6	1.4	47.0	28.0	13.4
..	Peatland.....	31	35	86	2.6	1.4	50.5	28.5	16.1
..	Colsess.....	57	35	83	2.4	3	46.0	32.0	14.4
Significant Difference 7.5 bus.											

Tests Discarded on Account of Damage by Pests, Hail, or Other Causes

8 8 A Nels John Wetterlund, Sturgis.

Note.—The figures and letters preceding name represent, in order, the District, Sub-District, and Test Designation.

Table No. 1 (Continued)
CEREAL VARIETY ZONE 4B

Dist.	Sub-dist.	Test designation	Variety	Yield bus. per acre	Plant height in inches	Days seedling to ripe	Straw strength	Neck strength	Pounds per measured bushel	Weight per 1000 kernels in grams	Protein content in percentage
MERVIN LESLIE MADSEN, AVEBURY											
15	6	A	Regal.....	37	36	78	2.6	2.6	48.5	26.0	14.2
..	Trebi.....	32	33	73	2.2	2.6	44.0	26.3	16.2
..	O.A.C. 21.....	31	38	75	2.2	1.4	45.5	22.0	14.1
..	Peatland.....	19	33	79	2.8	1.8	51.0	25.0	17.3
..	Colless.....	40	36	72	2.8	3	42.0	27.8	15.3
Significant Difference 6.6 bus.											
ROBERT EDGAR WOOD, BIG RIVER											
15	6	B	Regal.....	45	31	92	3	3	50.5	39.5	10.9
..	Trebi.....	51	24	92	1.8	3	51.0	54.3	9.3
..	O.A.C. 21.....	52	32	90	2	1	52.0	39.0	13.5
..	Peatland.....	34	31	89	3	2.4	52.5	31.5	12.5
..	Colless.....	37	27	86	2.6	3	50.0	40.0	11.5
Significant Difference 6.2 bus.											
FLOYD HUGHES, CANWOOD											
15	7	A	Regal.....	42	32	84	3	3	47.0	34.5	12.7
..	Trebi.....	61	29	84	2.4	2.4	50.5	44.0	12.6
..	O.A.C. 21.....	42	33	84	3	1.4	44.5	34.3	13.0
..	Peatland.....	17	29	84	3	2.6	45.5	25.5	16.1
..	Colless.....	30	30	79	2.8	3	44.0	33.0	14.0
Significant Difference 7.9 bus.											
WILFRED TEARANCE MARTIN, WILDE ROSE											
15	8	B	Regal.....	66	40	95	1	2	49.0	35.0	13.5
..	Trebi.....	81	39	100	1.2	2.8	49.5	49.3	12.7
..	O.A.C. 21.....	74	46	90	1.2	1	50.0	38.8	12.5
..	Peatland.....	51	39	104	2	1	52.5	29.0	16.0
..	Colless.....	72	41	84	1.6	2	46.5	35.5	13.6
Significant Difference 8.3 bus.											
SASK. POOL ELEVATORS LTD. SPECIAL DEMONSTRATION PLOT, SHELL LAKE											
15	6	C	Regal.....	40	39	88	3	3	50.5	33.3	12.5
..	Trebi.....	44	32	85	3	3	50.0	46.0	10.7
..	O.A.C. 21.....	45	41	86	3	1	50.0	30.8	12.0
..	Peatland.....	30	35	86	3	2.8	52.0	28.0	13.8
..	Colless.....	37	36	82	3	3	47.5	33.5	12.7
Significant Difference 9.9 bus.											
SEVILLE PREECE, BOLNEY											
16	7	A	Regal.....	38	30	83	3	3	52.0	35.8	14.9
..	Trebi.....	46	29	81	3	3	52.0	48.0	14.5
..	O.A.C. 21.....	46	35	87	3	2.4	53.5	38.0	14.6
..	Peatland.....	22	24	88	3	1.4	53.0	30.5	18.4
..	Colless.....	47	28	78	3	3	50.0	38.8	14.5
Significant Different 7.0 bus.											
WESLEY SIMPSON, PARADISE HILL											
16	7	B	Regal.....	14	23	91	3	3	55.0	35.0	16.2
..	Trebi.....	11	21	89	3	3	51.0	43.0	14.7
..	O.A.C. 21.....	11	24	90	3	2.4	51.5	28.3	15.1
..	Peatland.....	5	24	90	3	1.6	54.0	28.0	18.4
..	Colless.....	15	23	90	3	3	51.0	34.3	15.4
Significant Difference 6.9 bus.											
LLOYD GEORGE PROCTOR, MERVIN											
16	8	A	Regal.....	32	26	96	3	1.8	52.0	30.5	14.9
..	Trebi.....	43	25	94	2.6	2.8	50.5	42.5	13.9
..	O.A.C. 21.....	24	25	96	2.4	1.2	50.5	29.5	14.4
..	Peatland.....	12	24	97	2.4	1.4	51.0	26.8	17.4
..	Colless.....	27	24	95	3	3	48.5	32.5	15.2
Significant Difference 5.7 bus.											
DONALD WM. BELLAMY, BELBUTTE											
16	9	B	Regal.....	14	21	....	3	3	51.0	37.0	15.1
..	Trebi.....	22	19	....	3	3	48.0	43.3	11.8
..	O.A.C. 21.....	18	23	....	2.8	1.8	50.0	27.3	13.6
..	Peatland.....	9	21	....	3	1.8	51.0	30.0	15.4
..	Colless.....	13	21	....	3	3	48.0	37.5	14.2
Significant Difference 3.5 bus.											
DONALD JAMES EVANS, NORBURY											
16	10	B	Regal.....	55	32	85	2	2.8	52.0	38.8	12.3
..	Trebi.....	53	30	84	2.4	1.8	50.5	48.0	11.9
..	O.A.C. 21.....	37	35	86	2	1	50.5	37.8	12.7
..	Peatland.....	31	29	88	2.4	2	50.5	31.3	16.3
..	Colless.....	49	31	85	2.8	3	47.0	40.0	13.3
Significant Difference 6.6 bus.											

Tests Discarded on Account of Damage by Pests, Hail, or Other Causes

15 7 B Douglas Kell, Canwood 15 8 A Wm. Thos. Rogers, Fox Dale
16 9 A Sidney Clewes, East Anglia

Note.—The figures and letters before each name represent, in order, the District, Sub-District, and Test Designation.

Summarization According to Cereal Variety Zones **

Probably the most useful summarization of the data from this extensive series of barley variety tests is that which shows for each cereal variety zone the data on the different varieties for each important characteristic. In the following tables and discussions, the data have been studied on the basis of these cereal variety zones.

Zone 1A

The results for Zone 1A are summarized in Table 2. Trebi excelled in yield in this area. There are no significant differences between the yields of the other varieties. Colless showed a low bushel weight, but this deficiency is balanced by its strong necks, high protein, and value of the straw for feeding. Hannchen had no particular merit except in having a high bushel weight, which certainly could not overcome the ten bushel advantage in yield enjoyed by Trebi. O.A.C. 21 was also very poor in neck strength and poor in straw strength. Regal yielded ten bushels per acre less than Trebi, but was four inches taller, had stronger straw and a higher bushel weight. If the barley straw is to be used for feed, then Regal had an advantage over Trebi. However, considering only threshed grain, Trebi was the better variety.

TABLE 2—Summarized Results for Zone 1A

Character	Regal	Trebi	O.A.C. 21	Hannchen	Colless
*Yield in bushels per acre.....	31	41	29	31	31
Height of plant, in inches.....	29	25	30	26	26
Days from seeding to ripe.....	86	83	85	86	83
Straw strength.....	2.7	2.2	2.0	2.5	2.7
Neck strength.....	2.1	2.1	1.4	2.4	2.9
Bushel weight in lbs.....	51	49	50	53	47
Protein content in %.....	13.6	13.6	13.7	14.3	14.8

*A difference of three bushels between the yields of two varieties is significant.

Zone 1B

The results from Zone 1B are presented in Table 3. The yield of Regal was significantly lower than that of Hannchen and Trebi which tends to cancel its advantages in having smooth awns. The yields of O.A.C. 21 and Colless were low, O.A.C. having the weakest neck of all varieties tested. Hannchen yielded four bushels less than Trebi but had a considerably higher yield of straw, stronger straw, stronger necks, and was considerably higher in bushel weight and protein. These advantages tended to offset the greater yield of Trebi.

TABLE 3—Summarized Results for Zone 1B

Character	Regal	Trebi	O.A.C. 21	Hannchen	Colless
*Yield in bushels per acre.....	29	38	26	34	27
Height of plant in inches.....	26	24	27	24	24
Days from seeding to ripe.....	87	84	86	88	82
Straw strength.....	2.9	2.5	2.5	2.9	2.8
Neck strength.....	2.7	2.4	1.7	2.7	2.8
Bushel weight in lbs.....	52	49	51	53	47
Protein content in %.....	14.1	13.8	13.8	14.5	15.0

*A difference of three bushels between the yields of two varieties is significant.

Zone 2A

The summarized results for Zone 2A appear in Table 4. It is evident that the rust epidemic which afflicted Southeastern Saskatchewan had an effect in this zone. The high bushel weight and the fairly high yield of Peatland compared with the other varieties, and the unusually low yield of Regal all tend to confirm this. Hannchen, which is ordinarily quite susceptible to rust, had a rather high yield, due to its being grown only in the northwestern portion of the zone, where it would not be subjected to quite as severe an attack as were the other varieties. On the other hand, Peatland was tested only in the southwestern portion. Because of the rust attack and the fact

**Not long after the completion of the analysis of the data presented in this publication, the boundaries of the Cereal Variety Zones were changed somewhat to make the Zones more generally useful to Saskatchewan agriculturists rather than to have their usefulness limited solely to cereal recommendations. The revised boundaries deviate from the old ones in several respects: Zones 3B and 3D take in well-settled areas which formerly were in Zone 4A; Zone 1A takes in some dry territory which was formerly in Zone 2A; in various places irregularities have been smoothed out with the result that some sections which were near a zone boundary are now in the adjacent zone. These changes are not of sufficient magnitude to warrant re-analysis of all the barley data. No reproduction of the original zone boundaries is given here as the revised boundaries are likely to have considerable permanence and, therefore, should be the only ones published. It should also be noted that Zone 1 on the map has been divided for purposes of a more detailed analysis of barley data into 1A and 2A, the boundary being a line running east northeast from the Cypress Hills elevation to the edge of Zone 2A.

that such an epidemic is only of rare occurrence, it would seem advisable that any statement as to the superiority or inferiority of the varieties in this area be deferred until data for a more normal year is obtained. In the meantime, the exceptionally high yield of Trebi indicates that it is at least one of the best varieties for this zone.

TABLE 4—Summarized Results for Zone 2A

Character	Regal	Trebi	O.A.C. 21	Hannchen	Colsess	Peatland
*Yield in bushels per acre.....	31	45	30	37	33	21
Height of plant in inches.....	33	30	35	32	30	28
Days from seeding to ripe.....	82	81	82	86	80	85
Straw strength.....	2.5	1.9	2.1	2.1	2.3	2.8
Neck strength.....	2.4	2.1	1.8	2.6	2.8	2.2
Bushel weight in lbs.....	40	48	47	50	43	52
Protein content in %.....	12.2	13.0	12.6	13.0	13.9	16.0

*A difference of three bushels between the yields of two varieties is significant.

Zone 2B

Summarized results for Zone 2B are given in Table 5. Trebi excelled in yield and was early maturing while its other characters were reasonably satisfactory. The results suggest that the extra length and the good handling quality of the straw obtained by growing Regal or Colsess would offset their lower yield where bulk of feed is needed. Of the two, Regal, on account of its higher bushel weight, appears preferable to Colsess excepting where the latter's earliness might compensate for its lower bushel weight and shorter straw. Hannchen yielded the same as Regal and Colsess and had a higher bushel weight; it was shorter in the straw and hence was in general not the equal of Regal. Peatland and O.A.C. 21 were decidedly lower in yield than the other varieties. Their neck strength was also poor. The protein content of Peatland was outstandingly high.

TABLE 5—Summarized Results for Zone 2B

Character	Regal	Trebi	O.A.C. 21	Hannchen	Colsess	Peatland
*Yield in bushels per acre.....	37	46	31	38	37	28
Height of plant in inches.....	33	30	35	28	31	33
Days from seeding to ripe.....	88	84	86	88	84	89
Straw strength.....	2.7	2.2	2.1	2.4	2.6	2.6
Neck strength.....	2.5	2.2	1.5	2.4	2.8	1.8
Bushels weight in lbs.....	52	49	51	54	47	53
Protein content in %.....	13.4	13.5	13.6	14.4	14.2	15.8

*A difference of three bushels between the yields of two varieties is significant.

Zone 2C

The summarized results for the few tests which were conducted in Zone 2C are presented in Table 6. O.A.C. 21 and Regal were much lower in yield than Trebi and Hannchen. Colsess which was also low yielding and very low in bushel weight, does not seem to be a favourable variety in this zone. Hannchen was outstanding. It equalled Trebi in yield, was two inches taller, was heavier in weight per bushel, and was superior in quality of straw. The results suggest Hannchen as the best variety for the area.

TABLE 6—Summarized Results for Zone 2C

Character	Regal	Trebi	O.A.C. 21	Hannchen	Colsess
*Yield in bushels per acre.....	30	43	27	43	34
Height of plant in inches.....	30	25	30	27	26
Days from seeding to ripe.....	92	90	91	92	88
Straw strength.....	2.7	2.6	2.2	2.7	3.0
Neck strength.....	2.5	2.1	1.4	2.4	3.0
Bushels weight in lbs.....	53	51	52	55	49
Protein content in %.....	14.6	13.7	14.0	14.3	15.0

*A difference of five bushels between the yields of two varieties is significant.

Zone 3A

The results summarized from the tests in Zone 3A are shown in Table 7. This area was subject to a severe rust epidemic. Peatland, therefore, being resistant to rust showed up unusually well and Regal which proved the most susceptible of the five varieties gave a very poor performance. It must be borne in mind that such an epidemic occurs relatively infrequently and therefore undue emphasis should not be laid upon the rust resistance or susceptibility of the varieties. However, the results in general showed Trebi to be outstanding. Its bushel weight would indicate that it was affected by the rust and yet its yield was much superior to that of any other variety.

TABLE 7—Summarized Results for Zone 3A

Character	Regal	Trebi	O.A.C. 21	Colsess	Peatland
*Yield in bushels per acre.....	25	38	28	26	29
Height of plant in inches.....	37	32	40	33	34
Days from seeding to ripe.....	86	87	87	84	90
Straw strength.....	2.3	2.1	2.2	2.2	2.7
Neck strength.....	2.4	2.3	1.9	2.4	2.3
Bushel weight in lbs.....	42	46	45	41	53
Protein content in %.....	12.2	13.1	12.8	14.0	15.3

*A difference in four bushels between the yields of the two varieties is significant.

Zone 3B

Summarized results from the three tests carried in Zone 3B appear in Table 8. Compared with the other varieties Peatland and Colsess were extremely low in yield. O.A.C. 21 gave the same yield as Regal, but was inferior to it in neck strength and straw strength. It might be preferable, however, to grow O.A.C. 21 in this area because of the probability of malting barley premiums. Trebi again showed a superiority in yield, though not a very large one.

TABLE 8—Summarized Results for Zone 3B

Character	Regal	Trebi	O.A.C. 21	Colsess	Peatland
*Yield in bushels per acre.....	42	48	42	31	28
Height of plant in inches.....	38	31	39	34	38
Days from seeding to ripe.....	89	89	89	89	92
Straw strength.....	2.4	1.2	2.1	2.	2.7
Neck strength.....	2.5	2.1	1.4	3	2.4
Bushel weight in lbs.....	50	51	51	45	53
Protein content in %.....	12.0	12.1	12.7	13.3	15.5

*There were only three tests in this zone.

Zone 3C

Summarized results from Zone 3C tests are given in Table 9. O.A.C. 21 while not as strong strawed as Peatland, excelled it in yield by 6 bushels per acre and was four days earlier. Colsess was the lowest in yield, being nearly 50% below Trebi. Trebi was superior to Regal in yield of grain but was much shorter in straw, as well as being weaker in both the neck and the straw. These results indicate that where the straw is an important factor, Regal is to be preferred both from the standpoint of quality and quantity.

TABLE 9—Summarized Results for Zone 3C

Character	Regal	Trebi	O.A.C. 21	Colsess	Peatland
*Yield in bushels per acre.....	50	59	44	41	38
Height of plant in inches.....	37	33	40	34	36
Days from seeding to ripe.....	89	88	88	86	92
Straw strength.....	2.4	1.9	2.1	2.5	2.3
Neck strength.....	2.4	2.1	1.9	2.7	2.3
Bushel weight in lbs.....	49	50	48	45	52
Protein content in %.....	12.0	12.4	12.3	13.6	15.0

*A difference of five bushels between the yield of two varieties is significant.

Zone 3D **

The results for Zone 3D are given in Table 10. Trebi was the highest yielder but not significantly higher than Regal; both varieties were significantly higher than the other varieties. O.A.C. 21 out-yielded Peatland although the latter excelled in straw and neck strength. Further tests might reveal the suitability of this variety to some parts of the zone. The greater yield of the varieties Regal and Trebi, gave them a distinct advantage. Regal, because of its greater height and greater neck and straw

TABLE 10—Summarized Results for Zone 3D

Character	Regal	Trebi	O.A.C. 21	Colsess	Peatland
*Yield in bushels per acre.....	45	49	35	37	29
Height of plant in inches.....	36	31	38	32	35
Days from seeding to ripe.....	92	90	91	88	90
Straw strength.....	2.6	2.2	2.1	2.3	2.8
Neck strength.....	2.6	2.2	1.4	2.9	2.1
Bushel weight in lbs.....	53	50	52	48	53
Protein content in %.....	12.1	11.8	12.4	12.9	14.7

*A difference of nine bushels in the yield of two varieties is significant.

**Attention is drawn to the fact that this analysis includes only the Melfort-Birch Hills black soil co-operators, and that Zone 3D on the map includes the Tisdale-Nipawin co-operators, which, in this analysis, were included in Zone 4A (see Table 11).

strength and particularly because of its smooth awns, proved to be the better of the two varieties notwithstanding the difference in yield. From a feeding viewpoint, a smooth awned barley is much superior to a rough awned barley.

Zone 3E

The summarized results for Zone 3E are shown in Table 11. Trebi outyielded all the other varieties by a large margin and was early maturing, while Peatland was the lowest yielding. O.A.C. 21 was next lowest in yield and Hannchen, Colsess and Regal were intermediate. Hannchen was inferior in this area because of its short straw and late maturity. Colsess was early, quite tall and yielded fairly well, but its very low bushel weight constituted a serious disadvantage. As far as the one year's results go, they indicate that where the straw of the barley crop is an important source of feed, Regal would be the best variety in this area. Considering grain only, Trebi would make the more profitable of the two varieties.

TABLE 11—Summarized Results for Zone 3E

Character	Regal	Trebi	O.A.C. 21	Hannchen	Colsess	Peatland
*Yield in bushels per acre.....	31	37	26	30	29	17
Height of plant in inches.....	28	25	28	22	27	26
Days from seeding to ripe.....	91	87	90	97	87	90
Straw strength.....	2.8	2.5	2.3	2.8	2.8	2.9
Neck strength.....	2.7	2.5	1.5	2.6	2.9	1.9
Bushel weight in lbs.....	52	49	51	55	47	53
Protein content in %.....	14.6	14.5	14.3	15.6	15.2	17.2

*A difference of three bushels between the yield of two varieties is significant.

Zone 4A **

Summarized results for Zone 4A are presented in Table 12. Trebi was quite superior to all other varieties in yield, Peatland distinctly inferior, and Colsess poor. Since in this zone there are areas well suited to the production of a malting barley, O.A.C. 21, although weak necked and lower in yield than Regal and Trebi, might secure sufficiently higher prices for its grain to offset those disadvantages. As in other districts, Regal and Trebi tied in desirability, the smooth awns of the one fully balancing the higher yield of the other. On the whole, the results for this zone resemble those from Zone 3D.

TABLE 12—Summarized Results for Zone 4A

Character	Regal	Trebi	O.A.C. 21	Colsess	Peatland
*Yield in bushels per acre.....	52	63	48	44	38
Height of plant in inches.....	34	30	35	31	32
Days from seeding to ripe.....	88	88	88	35	89
Straw strength.....	2.2	2.2	2.	2.4	2.6
Neck strength.....	2.3	2.4	1.7	2.6	2.4
Bushel weight in lbs.....	52	50	51	47	53
Protein content in %.....	12.0	11.4	11.8	12.8	14.4

*A difference of five bushels between the yield of two varieties is significant.

Zone 4B

The results for Zone 4B are given in Table 13. In this zone Peatland was very inferior to all of the other varieties in yield. Height is not likely to be a limiting factor in the area, and so Trebi with its high yield appears in a favourable position. The difference in yield between Trebi, O.A.C. 21 and Regal was barely significant. Under circumstances where there is a reasonable possibility of producing barley of good malting quality, it might be advisable to grow O.A.C. 21 in preference to Regal. The choice would depend largely on whether the market value of O.A.C. 21 was appreciably higher than that of other barley and whether the barley straw was needed for feed.

TABLE 13—Summarized Results for Zone 4B

Character	Regal	Trebi	O.A.C. 21	Colsess	Peatland
*Yield in bushels per acre.....	38	44	38	37	23
Height of plant in inches.....	31	27	33	29	29
Days from seeding to ripe.....	88	87	87	84	90
Straw strength.....	2.7	2.6	2.4	2.8	2.8
Neck strength.....	2.7	2.7	1.4	2.9	1.9
Bushel weight in lbs.....	51	50	50	48	51
Protein content in %.....	13.8	12.6	13.9	14.0	16.1

*A difference of six bushels between the yield of two varieties is significant.

**See footnote for Zone 3D, page 45.

Results Summarized According to Each Character

In Tables 14 to 21 the data have been summarized on the basis of agronomic characters.

TABLE 14—Yield in Bushels Per Acre Summarized According to Variety and Cereal Zone

Zone	Regal	Trebi	O.A.C. 21	Hannchen	Colsess	Peatland	Significant difference between two varieties (bus.)
1A.....	31	41	29	31	31	—	3
1B.....	29	38	26	34	27	—	3
2A.....	30	45	30	36	32	21	3
2B.....	37	45	31	37	36	27	3
2C.....	30	43	27	43	34	—	5
3A.....	25	38	28	—	26	28	4
3B.....	42	48	42	—	31	28	12
3C.....	50	59	44	40 *	41	38	5
3D.....	45	49	35	—	37	29	9
3E.....	31	37	26	30	29	17	3
4A.....	52	63	48	—	44	38	5
4B.....	38	44	38	—	37	23	6
Average.....	36.7	45.8	33.7	36.	33.8	27.7	—

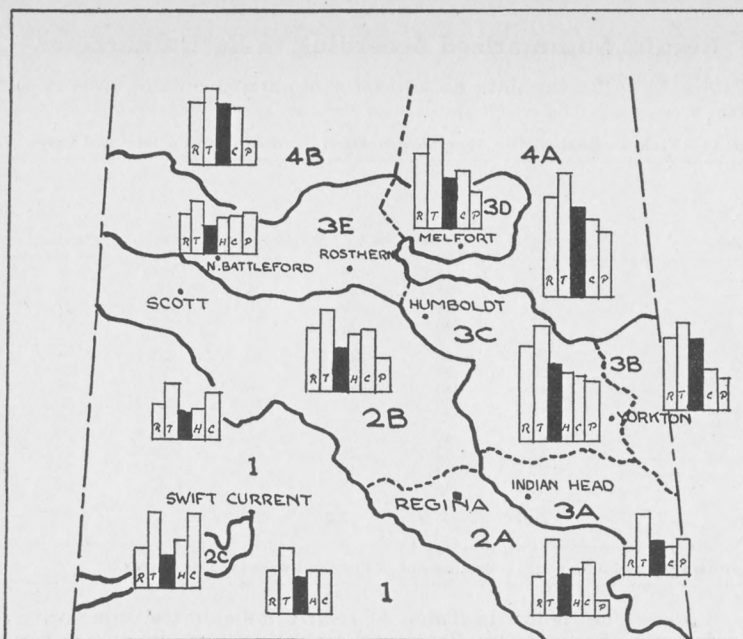
*Only two tests including Hannchen instead of Peatland were grown in Zone 3C.

Grain Yield.—The figures in Table 14 clearly indicate the superiority of Trebi over the other varieties in yield; Regal and Hannchen were its closest competitors. The superiority of Trebi was marked in every zone, although in some there was much less difference between Trebi and Regal than in others. The yields of Regal and Hannchen were generally similar with the important exceptions of Zones 1B, 2C, and 3C. Colsess and O.A.C. 21 were also generally similar. Very rarely was Regal exceeded by these varieties and in such cases the difference was not large enough to be significant. Peatland was decidedly inferior to all of the other varieties in yield. In comparing the yields of the varieties in Zones 2A and 3A it must be remembered that the barleys in these zones suffered from an abnormally severe rust attack such as is unlikely to occur at all frequently. This had important repercussions on two varieties, affecting their behaviour more than that of the other three. Peatland is very resistant to rust and hence its comparative performance was better than could be expected if the average of several years' results was considered. Regal, on the other hand, was severely injured by rust and therefore it could be expected that ordinarily its performance would compare more favorably with that of the other varieties than it did in 1935. These remarks also apply, but in lesser degree, to the results from Zones 2B, 3B, 3C, 4A and the southeastern portion of Zone 1B.

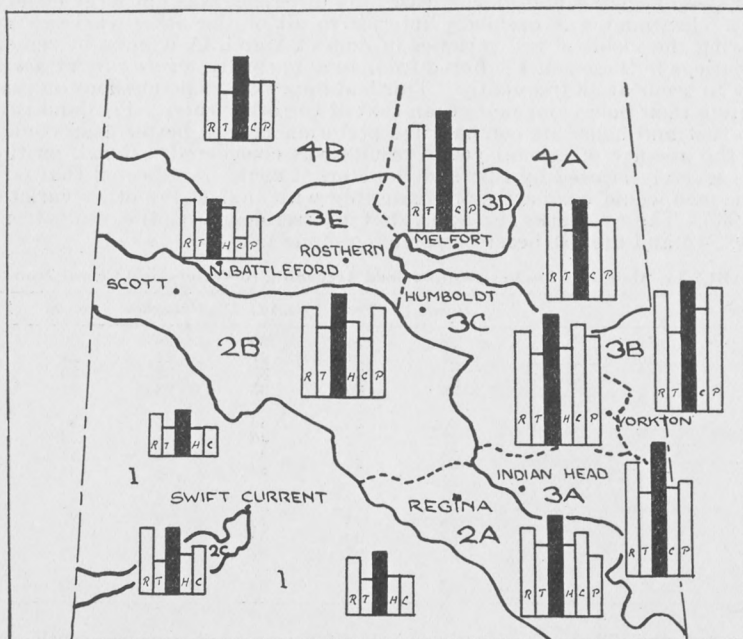
TABLE 15—Height in Inches Summarized According to Variety and Cereal Zone

Zone	Regal	Trebi	O.A.C. 21	Hannchen	Colsess	Peatland
1A.....	29	25	30	26	26	—
1B.....	26	24	27	24	24	—
2A.....	33	30	35	32	30	28
2B.....	33	30	35	28	31	33
2C.....	30	25	30	27	26	—
3A.....	37	32	40	—	33	34
3B.....	38	31	39	—	34	38
3C.....	37	33	40	38	34	36
3D.....	36	31	38	—	32	35
3E.....	28	25	28	22	27	26
4A.....	34	30	35	—	31	32
4B.....	31	27	33	—	29	29
Average.....	33	29	34	28	30	32

Plant Height.—There was not as much difference evident between the varieties in height as in yield. There was also less variation from zone to zone in the comparative performance of the varieties with respect to height than there was for yield. O.A.C. 21 which on the average, was the tallest variety, exhibited this superiority in almost every zone, usually exceeding Regal by one or two inches. Trebi and Hannchen were decidedly shorter than Regal and O.A.C. 21, a disadvantage which in some areas is important because of a lower quantity of straw and more difficulty in harvesting.



Histograms Showing Yield in Bushels per Acre. *Base of Histogram=15 Bushels.
R=Regal T=Trebi H=Hannchen C=Colsess P=Peatland Black=O.A.C. 21



Histograms Showing Height of Plant in Inches. *Base of Histogram=20 Inches
R=Regal T=Trebi H=Hannchen C=Colsess P=Peatland Black=O.A.C. 21

*Base of histogram=15 bushels means that each column indicates only the yield over 15 bushels. In considering the differences between varieties this should be kept in mind. This note applies similarly to all of the histograms.

Colsess was only a little better than Trebi and was considerably shorter than O.A.C. 21 and Regal. Peatland, while slightly shorter than Regal was distinctly superior to Trebi and Hannchen.

TABLE 16—Neck Strength * Summarized According to Variety and Cereal Zone

Zone	Regal	Trebi	O.A.C. 21	Hannchen	Colsess	Peatland
1A.....	2.1	2.1	1.4	2.4	2.9	—
1B.....	2.7	2.4	1.7	2.7	2.8	—
2A.....	2.4	2.1	1.8	2.6	2.8	2.2
2B.....	2.5	2.2	1.5	2.4	2.8	1.8
2C.....	2.4	2.6	1.4	2.5	3.0	—
3A.....	2.4	2.3	1.9	—	2.4	2.3
3B.....	2.5	2.1	1.4	—	3.0	2.4
3C.....	2.4	2.1	1.9	3.0	2.7	2.3
3D.....	2.6	2.2	1.4	—	2.9	2.1
3E.....	2.5	2.5	1.5	2.6	2.9	1.6
4A.....	2.3	2.4	1.7	—	2.6	2.4
4B.....	2.7	2.7	1.4	—	2.9	1.9
Average.....	2.5	2.3	1.6	2.6	2.8	2.1

*Figures for neck strength were obtained by assigning numbers to the notes, as follows: weak—1, medium—2, strong—3.

Neck Strength.—Colsess excelled in neck strength. Hannchen and Regal were not as strong as Colsess but were fairly good. Trebi was less strong in the neck than Regal, though it is worthy of note that in some zones this position was reversed. Peatland was still lower than Trebi, showing a decided weakness of the neck in some areas while in others it appeared fairly strong. The outstanding feature shown in the table is the extreme weakness of the neck in O.A.C. 21. In every zone this was evident and often resulted in a serious loss in yield through heads falling off before the grain was ripe enough to harvest.

TABLE 17—Straw Strength * Summarized According to Variety and Cereal Zone.

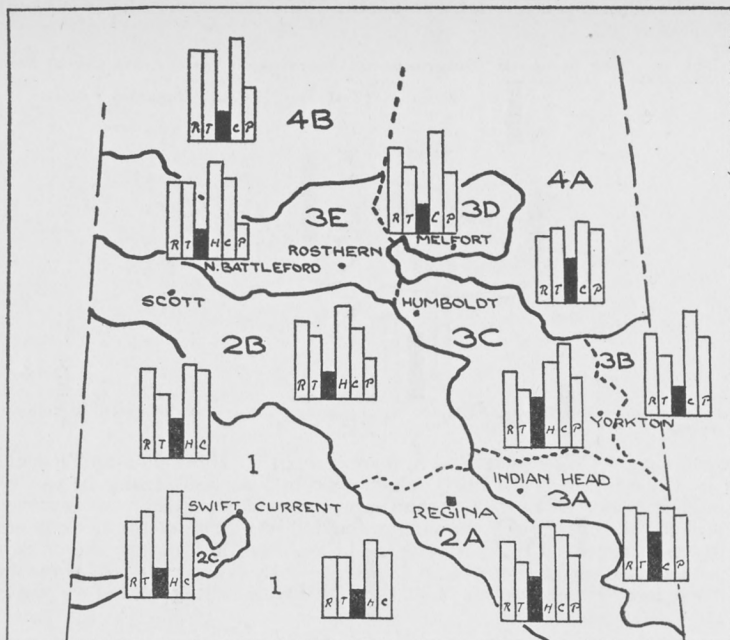
Zone	Regal	Trebi	O.A.C. 21	Hannchen	Colsess	Peatland
1A.....	2.7	2.2	2.0	2.5	2.7	—
1B.....	2.9	2.5	2.5	2.9	2.8	—
2A.....	2.5	1.9	2.1	2.1	2.3	2.8
2B.....	2.7	2.2	2.1	2.4	2.6	2.6
2C.....	2.7	2.6	2.2	2.7	3.0	—
3A.....	2.3	2.1	2.2	—	2.2	2.7
3B.....	2.4	1.2	2.1	—	2.8	2.7
3C.....	2.4	1.9	2.1	1.4	2.3	2.5
3D.....	2.6	2.2	2.1	—	2.3	2.8
3E.....	2.8	2.5	2.3	2.8	2.8	2.6
4A.....	2.2	2.2	2.0	—	2.4	2.6
4B.....	2.7	2.5	2.4	—	2.8	2.8
Average.....	2.6	2.2	2.2	2.4	2.6	2.7

*Figures for straw strength were obtained by assigning numbers to the notes, as follows: weak—1, medium—2, strong—3.

Straw Strength.—Trebi and O.A.C. 21 were inferior in straw strength compared to Peatland, Regal and Colsess which were the best. Hannchen was intermediate for this character. There was a great deal of variation in the comparative strengths of the varieties in the different zones. The superiority of Peatland was emphasized in the areas where moisture was especially prevalent.

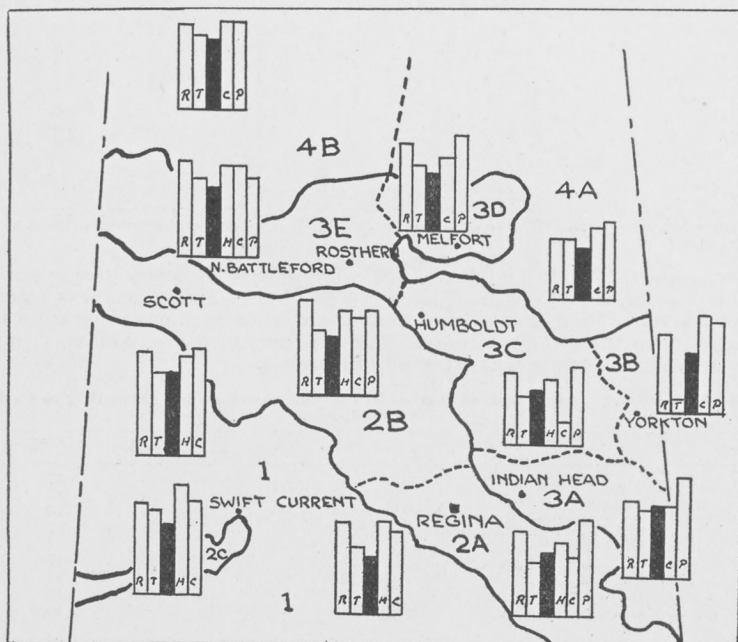
TABLE 18—Weight per Measured Bushel in Pounds Summarized According to Variety and Cereal Zone

Zone	Regal	Trebi	O.A.C. 21	Hannchen	Colsess	Peatland
1A.....	51	49	50	53	47	—
1B.....	52	49	51	53	47	—
2A.....	46	48	47	50	43	52
2B.....	52	49	51	54	47	53
2C.....	53	51	52	55	49	—
3A.....	42	46	45	—	41	53
3B.....	50	51	51	—	45	53
3C.....	49	50	48	—	45	52
3D.....	53	50	52	—	48	53
3E.....	52	49	51	55	47	53
4A.....	52	50	51	—	47	53
4B.....	51	50	50	—	48	51
Average.....	50	49	50	53	46	52



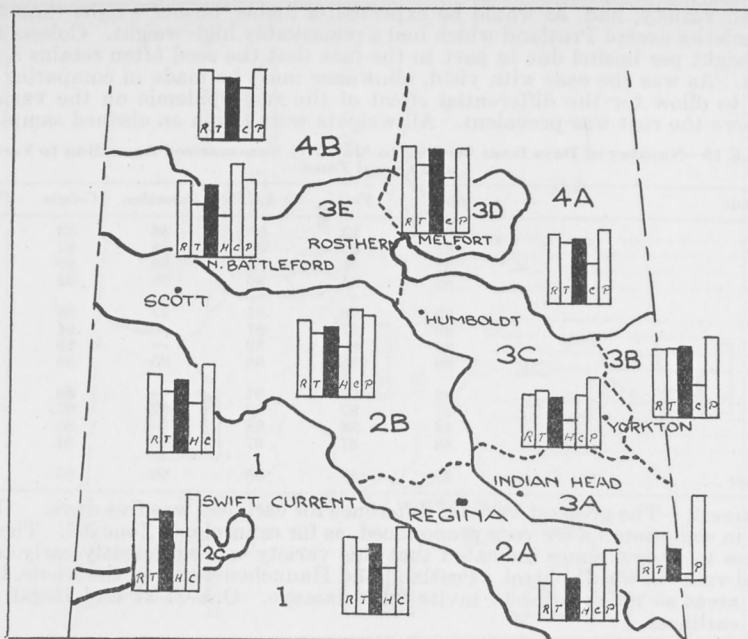
Histograms Showing Neck Strength. Base of Histogram=1

R=Regal T=Trebi H=Hannchen C=Colsess P=Peatland Black=O.A.C. 21

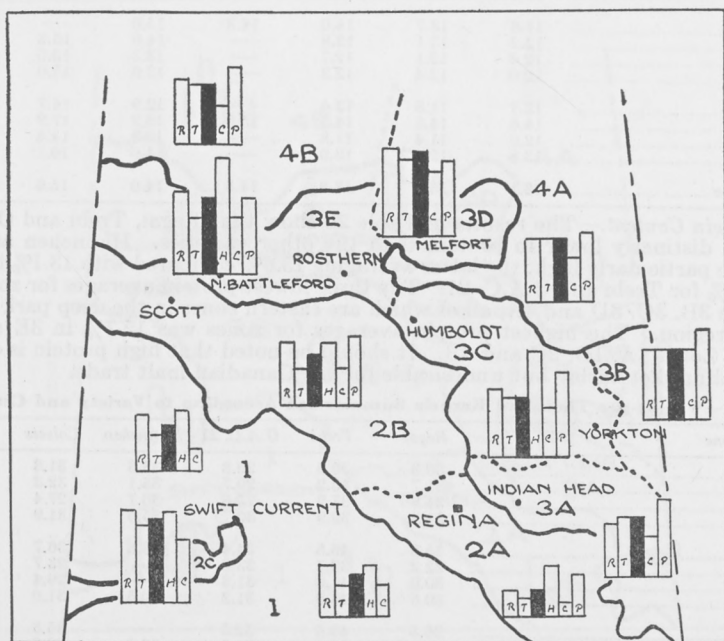


Histograms Showing Straw Strength. Base of Histogram=1

R=Regal T=Trebi H=Hannchen C=Colsess P=Peatland Black=O.A.C. 21



Histograms Showing Weight per Measured Bushel in Pounds. Base of Histogram=40 Pounds
 R=Regal T=Trebi H=Hannchen C=Colsess P=Peatland Black=O.A.C. 21



Histograms Showing Number of Days from Seeding to Maturity. Base of Histogram=78 Days
 R=Regal T=Trebi H=Hannchen C=Colsess P=Peatland Black=O.A.C. 21

Bushel Weight.—The average bushel weights for all the varieties were quite similar with the exception of Hannchen, Peatland and Colless. The former, being a two-rowed variety, had, as would be expected, a higher bushel weight than the six-rowed varieties except Peatland which had a remarkably high weight. Colless had the lowest weight per bushel due in part to the fact that the seed often retains a part of the hood. As was the case with yield, allowance must be made in comparing bushel weights, to allow for the differential effect of the rust epidemic on the varieties in areas where the rust was prevalent. All weights were taken on cleaned samples.

TABLE 19—Number of Days from Seeding to Maturity Summarized According to Variety and Cereal Zone

Zone	Regal	Trebi	O.A.C. 21	Hannchen	Colless	Peatland
1A.....	86	83	85	86	83	—
1B.....	87	84	86	88	82	—
2A.....	82	81	82	86	80	85
2B.....	88	84	86	88	84	89
2C.....	92	90	91	92	88	—
3A.....	86	87	87	—	84	90
3B.....	89	89	89	—	89	92
3C.....	89	88	88	95	86	92
3D.....	92	90	91	—	88	90
3E.....	91	87	90	97	87	90
4A.....	88	88	88	—	85	89
4B.....	88	87	87	—	84	90
Average.....	88	87	88	90	85	90

Earliness.—The greatest varietal difference for earliness was five days. The differences in some zones were very pronounced, as for example, in Zone 3E. The results on Colless in several zones indicated that this variety was sufficiently early to prove of special value in weed control. Peatland and Hannchen were, on the whole, late and in some areas so much so as to invite frost damage. O.A.C. 21 and Regal were of medium earliness.

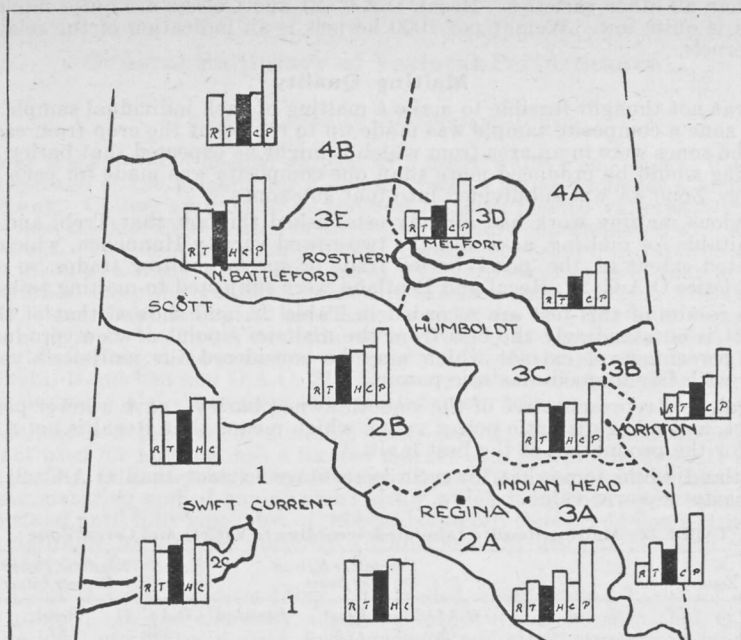
TABLE 20—Protein Content in Percentage Summarized According to Variety and Cereal Zone.

Zone	Regal	Trebi	O.A.C. 21	Hannchen	Colless	Peatland	Zone Ave.
1A.....	13.6	13.6	13.7	14.3	14.8	—	14.0
1B.....	14.1	13.8	13.8	14.5	15.0	—	14.2
2A.....	12.2	13.9	12.6	13.0	13.9	16.0	13.1
2B.....	13.4	13.5	13.6	14.4	14.2	15.8	13.9
2C.....	14.6	13.7	14.0	14.3	15.0	—	14.4
3A.....	12.2	13.1	12.8	—	14.0	15.3	13.5
3B.....	12.0	12.1	12.7	—	13.3	15.5	13.1
3C.....	12.0	12.4	12.3	—	13.6	15.0	13.0
3D.....	12.1	11.8	12.4	—	12.9	14.7	12.8
3E.....	14.6	14.5	14.3	15.6	15.2	17.2	15.7
4A.....	12.0	11.4	11.8	—	12.8	14.4	12.5
4B.....	13.8	12.6	13.9	—	14.0	16.1	14.1
Average.....	13.1	13.2	13.2	14.8	14.0	15.6	—

Protein Content.—The results in Table 20 show that Regal, Trebi and O.A.C. 21 averaged distinctly lower in protein than the other varieties. Hannchen and Peatland were particularly high, the latter averaging 15.6% compared with 13.1% for Regal and 13.2% for Trebi and O.A.C. 21. The three lowest protein averages for zones were for Zones 3B, 3C, 3D and 4A, all of which are eastern zones in the deep park belt and wooded region. The highest protein averages for zones was 15.7% in 3E and over 14.0% in Zones 1A, 1B, 2C and 4B. It should be noted that high protein is desirable in general market barley but undesirable for the Canadian malt trade.

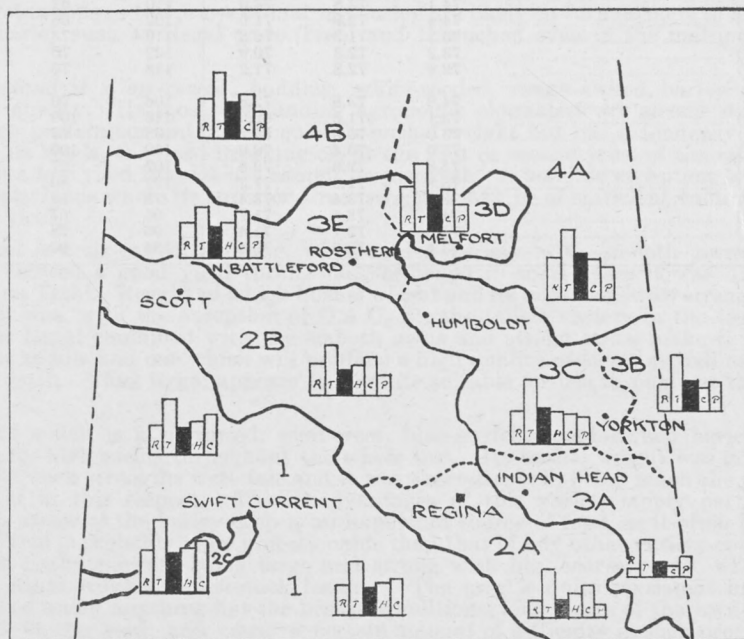
TABLE 21—Weight per Thousand Kernels Summarized According to Variety and Cereal Zone.

Zone	Regal	Trebi	O.A.C. 21	Hannchen	Colless	Peatland
1A.....	30.3	39.5	29.8	33.3	31.8	—
1B.....	31.7	40.2	29.7	35.1	32.3	—
2A.....	24.8	37.9	25.8	30.7	27.4	24.9
2B.....	31.8	39.9	30.7	35.5	31.9	27.8
2C.....	35.8	46.8	34.4	38.6	36.7	—
3A.....	22.2	33.7	23.8	—	23.7	26.9
3B.....	30.0	41.6	31.3	—	29.4	30.6
3C.....	30.6	43.9	31.2	30.5	31.0	29.1
3D.....	36.5	46.5	32.5	—	35.3	29.4
3E.....	33.3	38.1	31.2	36.8	32.3	28.1
4A.....	34.7	46.6	36.0	—	34.1	30.3
4B.....	34.5	44.5	32.6	—	35.3	28.6
Average.....	30.5	40.4	30.0	34.3	30.9	28.1



Histograms Showing Protein Content in Percentage Dry Basis. Base of Histogram=10.0 per cent.

R=Regal T=Trebi H=Hannchen C=Colsess P=Peatland Black=O.A.C. 21



Histograms Showing Weight per Thousand Kernels in Grams. Base of Histogram=20.0 Grams

R=Regal T=Trebi H=Hannchen C=Colsess P=Peatland Black=O.A.C. 21

Weight per 1000 Kernels.—The weight per 1000 kernels of Trebi is distinctly higher than all other varieties. Regal, O.A.C. 21 and Colsess are quite similar while Peatland is quite low. Weight per 1000 kernels is an indication of the relative size of the kernels.

Malting Quality

It was not thought feasible to make a malting of each individual sample, so that for each zone a composite sample was made up to represent the crop from each zone. Where the zones were in an area from which it might be expected that barley suitable for malting would be produced more than one composite was made for each of these zones, e.g., Zone 4A was subdivided into four sub-zones.

Previous malting work had already established the fact that Trebi and Colsess are unsuitable for malting, as is also the two-rowed variety Hannehen, which is used to a limited extent in the pearl barley trade or special malting trades, so only the three varieties O.A.C. 21, Regal and Peatland were subjected to malting tests.

The results of this test are recorded in Table 22, and showed that of the three O.A.C. 21 is outstandingly the best from the maltster's point of view, producing the greatest percentage of extract which may be considered the maltster's yard-stick together with fair to good diastatic power.

Regal, as a representative of the smooth awned barleys, gave a lower percentage of extract, and a low diastatic power value, which means that Regal is not a suitable variety for the production of the best malt.

Peatland while somewhat lower in percentage extract than O.A.C. 21, gave a higher diastatic power value.

TABLE 22—Malting Results Tabulated According to Variety and Cereal Zone

Cereal Zone	Percentage Extract Dry Basis			Diastatic Power in Degrees Lütner		
	O.A.C. 21	Regal	Peatland	O.A.C. 21	Regal	Peatland
1A	74.5	72.0	—	142	82	—
1B	73.0	72.6	—	128	75	—
2A	74.0	72.3	—	109	68	—
2B (a)	74.0	72.9	72.0	121	66	130
(b)	73.2	71.0	—	118	78	—
(c)	71.8	71.6	—	106	103	—
2C	75.3	71.8	—	139	103	—
3A	74.1	72.8	73.0	110	62	124
3B (a)	74.6	72.9	71.9	102	66	140
(b)	73.2	71.2	70.8	110	73	135
3C (a)	73.2	72.3	70.9	122	70	138
(b)	72.9	72.8	71.2	118	76	133
3D	74.9	73.8	72.8	106	70	112
3E (a)	73.1	71.5	69.6	116	109	143
(b)	73.0	70.6	69.7	138	96	156
(c)	73.0	70.4	70.0	150	100	161
4A (a)	75.8	72.6	72.8	107	27	114
(b)	73.8	71.9	71.2	121	80	148
(c)	73.2	73.4	73.4	78	52	94
(d)	74.7	73.5	71.7	96	67	142
4B (a)	74.8	72.1	71.4	96	78	120
(b)	73.4	70.0	70.4	134	90	149

General Summary of Varietal Performance

Varieties Listed in Alphabetical Order

Colsess is a six-rowed hooded variety with fairly white seed. It was included in the test because of the demand for a hooded variety which produces a high quality straw or hay. *Colsess* appears to be the best of these hooded varieties. Unfortunately the seed stock of *Colsess* used in the tests was badly contaminated with loose and covered smut. The smut infection probably reduced the yield quite appreciably. In the tests taken as a whole, *Colsess* averaged distinctly lower in yield than any of the other varieties excepting *Peatland*, which it excelled considerably. The relatively low yield, short straw and very low bushel weight are only partially compensated for by a superiority in straw strength, neck strength and earliness. Susceptibility to smut adds to these disadvantages. Generally, *Colsess* compared unfavorably with *Regal*, *Trebi*, *Hannchen* and O.A.C. 21. However, as a feed proposition where early cutting is desirable, *Colsess* appears to be a satisfactory variety.

Hannchen is a two-rowed, nodding, white-seeded, rough-awned variety which, though not used for malting, has a limited market as a pearling barley. It is a high yielding variety with very high bushel weight but suffers the disadvantages of being rather late maturing and of having short straw which is inclined to be weak. If allowed to stand until fully ripe most of its beards fall off, thus producing a straw which is fairly desirable for feeding purposes. *Hannchen* has distinct merit in the drier areas, notably in Zone 1.

O.A.C. 21 is a six-rowed, nodding, blue-seeded, rough-awned barley of excellent malting quality. In the character summary tables it can be seen that O.A.C. 21 showed decided inferiority in yield, neck strength and straw strength in most of the zones. It was the tallest of the six varieties and had good bushel weight. Because of its low yield, poor neck and straw strength and its rough awns making a poor feed quality straw, this variety is certainly not desirable for areas where feed barley is usually grown. Its use, however, is justified when and where the price for malting barley is sufficiently high to offset the variety's disadvantages. It would appear that wide fluctuations in the prices of malting barley are likely to turn farmers to a smooth awned barley such as *Regal* or to *Trebi* and *Hannchen* even in the malting barley areas.

Peatland is a six-rowed, nodding, white-seeded, rough-awned barley of good malting quality. Its most outstanding agronomic characters are strong straw and very high protein content. It is good in bushel weight but has a tendency to drop some of its heads, the head breaking off at the first or second joint of the rachis. It has such a low yield that its use cannot be justified. A possible exception is on low-lying peaty lands where its superior straw strength may be of sufficient value to offset the low yield.

Regal is a six-rowed, nodding, white-seeded variety with smooth awns. This variety showed a good yield throughout, although in most cases it was distinctly lower than *Trebi*. *Regal* had a high bushel weight and its neck and straw strength were good. It was, with the exception of O.A.C. 21, the tallest variety in the test. The height of *Regal* combined with the smooth awns and strong straw make it an easy barley to handle and one which will produce a high quality of straw as well as a good yield of grain. Thus *Regal* appears to be quite suitable for use throughout the province.

Trebi which is a six-rowed, semi-erect, blue-seeded, rough-awned barley, gave exceedingly high yields throughout the whole test. Its bushel weight was good, the straw and neck strengths were fair and it was short-strawed, being much the same as *Hannchen* in this respect. The disadvantages of this variety apply particularly when the straw of the barley crop is an important source of food, as it often is. The awn of *Trebi* is probably more objectionable than that of any other variety commonly grown in Saskatchewan, being large and strong with big, coarse barbs, which frequently cause trouble in livestock feeding. The awn is quite persistent in *Trebi*. If threshed under anything but the best of conditions, long pieces of the awn remain attached to the seed, and cause a certain amount of difficulty in such processes as cleaning, grinding and sowing. Generally, because of its high yield, *Trebi* appears to be very satisfactory for use throughout the province, providing that the grain only is to be fed. As indicated by its weight per thousand kernels the grain is unusually large.

Conclusions

The 1935 barley variety test, as described in the foregoing pages, was the most ambitious project of the kind ever conducted in Canada. It has proven very successful in several ways. It demonstrated that a complicated, exacting comparative variety test could be supervised satisfactorily by inexperienced but highly intelligent farmers and farm boys, 291 out of the 355 having completed the test, thus paving the way for rapidly securing at any time exhaustive comparative data on new varieties or treatments. Another result of the test was the never-to-be-forgotten visual demonstration to the co-operators of the method of making an *accurate* comparative test of varieties. This alone is an invaluable experience to those who participated. A third result is the contact made between the co-operators and various institutions and the realization on the part of the co-operators that various agencies can and do co-operate very effectively toward agricultural welfare. Finally, the data from these tests are of considerable value and should aid the farmers in their choice of a barley variety to grow, as well as give the professional advisors in agriculture extensive reliable information upon which to base their recommendations.

Acknowledgments

A project of this size to be carried out to a successful conclusion must have the hearty co-operation of every one concerned. To single out any one co-operator, individual or institution for special thanks is impossible. No one has fallen down on the part of the work allotted to them. Thanks are due to all who have had a part to play however small.

Throughout this report the various agencies co-operating with the Saskatchewan Co-operative Wheat Producers Limited have been mentioned. Dr. J. B. Harrington, of the University of Saskatchewan, supervised the planning of the experiment and the analysing of the field data collected. The Dominion Experimental Farms and Stations in Saskatchewan helped with the seeding and inspection of the plots and were responsible for the threshing and weighing of all the plots. The Cereal and Chemistry Divisions of the Central Experimental Farm at Ottawa were responsible for the grading, cleaning, taking the weights per 1000 kernels, the weight per measured bushel and the protein content of all samples. The Malting Laboratory at the Agricultural College at Winnipeg conducted the malting tests. Officers of the Extension Service of the Department of Agriculture for Saskatchewan, officers of the Dominion Seed Branch in Saskatchewan, and District Representatives of the Wheat Pool were responsible for a large part of the inspection of plots. P. R. Cowan, Secretary of the sub-committee on Barley Production and Breeding, compiled much of this report.

Without the help of the Junior and Senior farmers themselves this project could not have been brought to so successful a conclusion. Thanks are due to them, each and every one.